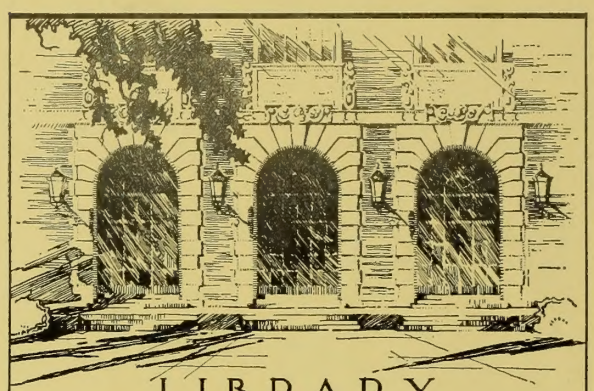


LIBRARY
OF THE
UNIVERSITY
OF ILLINOIS

551.05
UNWE
1914-20

OF THE
UNIVERSITY OF ILLINOIS
13 JUN 1914

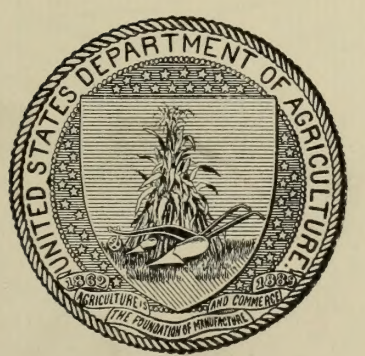
U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

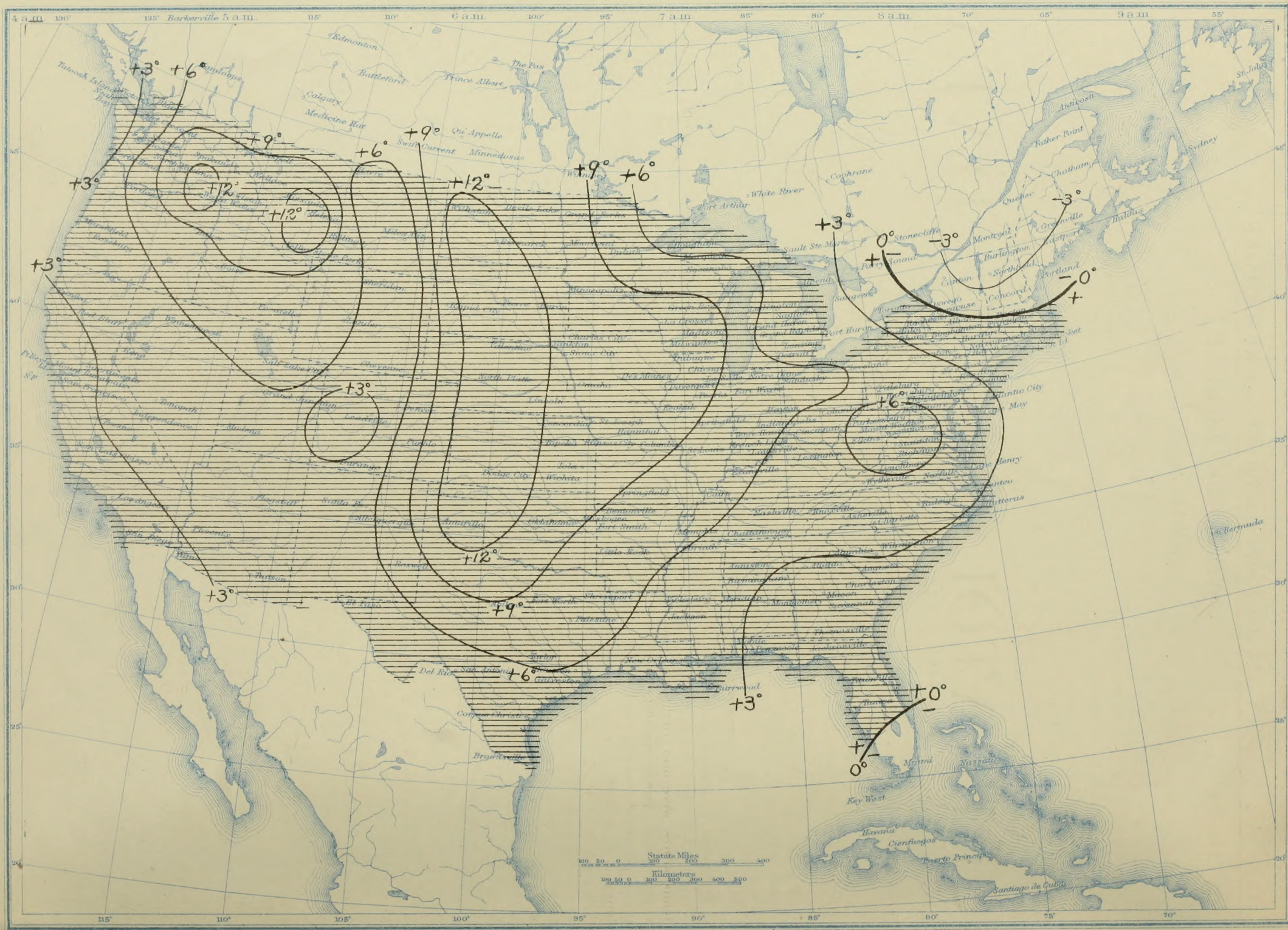
JANUARY, 1914

BY
HENRY C. HOWE
SECTION DIRECTOR



CLEVELAND, OHIO
WEATHER BUREAU OFFICE
MARCH 24, 1914

Departure of the Mean Temperature from the Normal, January, 1914.



551.05
UNWE
1914-20

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

GENERAL SUMMARY.

The January mean temperature for the State as a whole was much above the normal. For the past 24 years the January averages were higher only 5 times. The precipitation as a whole was considerably below the normal, but the snowfall was considerably above the January average. The precipitation was quite favorably distributed over the State and throughout the month. As a whole, the conditions were exceptionally favorable.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 29.99 inches. The highest observed at Parkersburg was 30.54 inches; lowest, 29.37 inches. The highest observed at Elkins was 30.61 inches; lowest, 29.41 inches. Areas of low pressure of slight or moderate intensity passed over the State on the 3d-4th, 8-9th, 15-16th, 19-20th, 23d-24th, 29th, and 30th-31st. High pressure areas of marked intensity covered the State on the 12-13th and 18th.

TEMPERATURE.

The monthly mean of the State, 50 stations reporting, was 35.8°, or 3.6° above the January average for 24 years. The temperatures were near the normal until the 8th. Warm weather for the season prevailed from the 8th to 10th. The lowest temperatures, ranging from 15° above to 11° below zero, the only cold weather of the month, prevailed from the 11th to 14th. Excepting the 17-18th, 22d, and 25th, moderately warm weather prevailed from the 15th to 26th. Exceptionally high temperatures for the season prevailed from the 26th to 30th, inclusive. The highest readings on the 29th ranged generally from 70° to 80° and the January record was exceeded at many stations. A temperature of 83° was recorded at Powellton and Smithfield. The highest previous January record was 80° in 1906.

HUMIDITY.

At Parkersburg the average humidity at 8 a. m. was 75 per cent of the possible amount; at 8 p. m., 72 per cent. The 8 a. m. and 8 p. m. averages at Elkins were 84 and 78 per cent, respectively. The 25-year January averages for Parkersburg are as follows: 8 a. m., 84 per cent; 8 p. m., 78 per cent. For Elkins the 15-year January averages, 8 a. m. and 8 p. m., are 84 per cent and 79 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 57 stations reporting, was 3.16 inches, or about one-half an inch below the January average for 23 years. The average snowfall, however, 15.6 inches, was nearly 6 inches above the January average. Except at a few of the more elevated stations, nearly all the snowfall was received from the 1st to 4th, the amounts for that period ranging generally from 4 inches to more than 2 feet. The snowfall was heaviest over the southeast counties. The falls were unimportant in sections along the Ohio river and they were generally light over the eastern panhandle section. The precipitation, rain and melted snow, was generally slightly above the normal over the southeast counties and eastern panhandle section. The amounts were generally considerably deficient in nearly all other sections. The rivers and streams were low during the month and practically free from ice.

WIND.

The average wind velocity at Parkersburg was 7.7 miles an hour; at Elkins, 5.3 miles. The average velocity for January for Parkersburg for 25 years is 6.2 miles per hour; for Elkins for 16 years, 5 miles per hour. The prevailing direction at Parkersburg was from the south; at Elkins, west. There were no destructive winds.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 26 per cent of the possible amount, or normal as compared with the January average for the past 17 years. The average for Elkins was 23 per cent, or 5 per cent below the 15-year January average. As a whole, there was an excess of cloudiness.

MISCELLANEOUS PHENOMENA.

Fog, dense: Grafton and Pickens, 19th; Grafton and Wellsburg, 20th; Holcomb, 30th.

Hail: Moundsville, 2d.

Halos, lunar: Ryan, 7th and 8th; Parkersburg and Pickens, 8th; Wellsburg, 9th.

Sleet: Elkins, 17th.

Thunderstorms: Fairmont, Holcomb, and Lost Creek, 20th; Central Station, Grafton, Lewisburg and Philippi, 21st; Ryan, 31st.

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in inches.
1891	31.7	..	....	3.64	....
1892	29.4	76	− 3	3.15	....
1893	22.6	71	−25	2.49	....
1894	36.6	70	− 8	2.41	....
1895	25.0	69	−21	4.48	....
1896	32.4	72	− 6	1.57	....
1897	28.8	69	−18	1.70	....
1898	37.1	75	− 5	5.10	....
1899	32.1	70	−21	4.05	7.5
1900	34.5	74	−10	2.24	1.9
1901	33.6	69	− 4	2.41	7.3
1902	30.2	64	− 1	3.65	9.8
1903	31.8	79	− 7	3.21	8.6
1904	27.5	72	−18	2.72	10.8
1905	26.4	70	−14	3.15	22.0
1906	38.2	80	− 5	3.79	5.1
1907	38.7	76	−15	6.41	5.6
1908	31.0	62	−16	2.92	12.8
1909	36.8	76	− 5	3.41	8.7
1910	32.0	67	− 5	5.68	15.4
1911	37.3	71	− 5	5.86	7.0
1912	23.5	66	−34	2.60	13.6
1913	40.7	74	9	6.23	5.7
1914	35.8	83	−11	3.18	15.6

FEB25'43 B/g

Climatological Data for January, 1914.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	31.0	+3.5	72	29	−11	14	46	5.65	+0.52	1.60	40.2	16	6	3	22	w.	Solomon Clark
Burlington	Mineral	875	20	33.4	+2.9	67	28	3	14	38	2.80	+0.49	1.00	12.0	5	6	18	7	w.	J. W. Vandiver
Franklin	Pendleton		8	34.2		64	28†	2	14	34						10	12	9		Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25								4.01	+1.24	1.52	3.4	6					S. W. Lightner
Lost City	Hardy		8	34.6		70	30	8	13	30	3.19		1.50	17.0	5	8	10	13	w.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	34.0	+3.9	62	29	4	14	40	3.98	+1.58		T.	8	15	8	8	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	33.8	+1.9	72	29	3	14	36	3.13	+0.57	1.40	18.5	5	7	20	4	nw.	John C. Fisher
Upper Tract	Pendleton	1,230	15	36.6	+3.0	75	29	1	14	37	1.95	−0.67	1.40	15.0	3	2	14	15	w.	J. M. Mallow
Averages and	Extremes			33.9	+3.0	75	29	−11	14	46	3.53	+0.62	1.60	15.2	7	8	12	11	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	35.7	+4.1	70	29	8	14	35	3.08	−0.96	1.03	12.0	7	18	7	6		J. D. Riggs
Brandonville	Preston	1,809																		W. T. Miller
Buckhannon	Upshur	1,411	24	35.4	+4.1	79	29	2	14	48	4.26	+0.30	1.00	16.5	14	6	5	20		H. A. Darnall
Cairo	Ritchie	674	12	36.2	+2.2	74	29†	4	14	38	4.58	+0.54	1.90	8.5	16	4	5	22		Van A. Zevely
Central Station	Doddridge	950	12	36.0	+5.0	78	29	1	14	43	2.52	−0.93	0.98	18.0	10	3	6	22	w.	G. W. Sherwood
Cheat Bridge	Randolph		1								3.40		0.75		7					Franz A. Degler
Cortland	Tucker		1								5.27		1.60	26.0	9					Samuel Harmon
Creston	Wirt	701	13	38.2	+5.4	74	29	6	13	42	1.71	−1.58	0.50	4.7	9	3	7	21	sw.	J. M. Reed
Davis	Tucker		7								4.61		0.90	37.0	20				sw.	Ross C. Male
Elizabeth	Wirt		4								2.33		0.75		9					E. D. Ball
Elkins	Randolph	1,940	15	35.2	+6.2	78	29	1	14	42	2.31	−1.03	0.49	13.4	17	4	4	23	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	34.2		81	29	3	14	46	2.91	−0.81	0.75	14.5	15	7	1	23	w.	F. P. Hall
Glenville	Gilmer	738	25	37.4	+5.0	80	29	4	14	45	2.72	−1.38	0.85	13.0	9	8	8	15	w.	Joe N. Craddock
Grafton	Taylor	1,000	22	37.6	+5.9	76	29	2	14	43	2.74	−0.99	0.60	15.0	10	9	1	21	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	33.7	+1.1	79	29	−1	14	51	2.01	−1.70	0.78	11.0	8	7	1	23	w.	Allen Smith
Mannington	Marion	974	12	34.7	+4.4	79	29	−5	14	49	3.68	−0.71	1.52	26.9	17	5	2	24	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	36.4	+4.7	79	29	3	14	35	2.10	−1.79	0.53	11.6	8	3	9	18	nw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	36.2	+4.5	75	29	3	14	39	2.57	−0.37	1.29	16.8	9	8	1	22	sw.	M. L. Brown
New Cumberland	Hancock	987	15	32.6	+4.8	70	29	−5	14	35	1.95	−0.46	1.00	12.0	4	4	4	23		Frank S. Evans
New Martinsville	Wetzel	634	21	37.6	+5.2	75	29	6	14	40	3.26	−0.18			6	4	6	21	s.	Wm. Ankrom
Parkersburg	Wood	638	26	37.6	+6.3	73	29	12	14	33	1.55	−1.64	0.53	2.9	12	6	4	21	s.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	32.0	+0.8	80	29	−5	14	51	3.75	−1.15	0.80	29.0	11	5	8	18		J. W. Swisher
Philippi	Barbour	1,149	22	36.2	+4.4	82	29	3	14	46	3.42	−0.56	0.74	22.4	20	6	2	23	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	32.4	+1.4	80	29	−6	13	45	5.43	−0.80	1.50	31.0	14	7	5	19	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29								3.30	−0.88	0.70	19.0	20				w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7								2.65		0.60	10.0	8				e.	J. O. Goodman
Smithfield	Wetzel	835	10	32.9		83	29	−3	14†	55	4.43	−1.10	1.49	29.5	13	6	10	15	n.	G. M. Whisler
Terra Alta	Preston	2,612	14																	Prof. Wm. R. Shaw
Wellsburg	Brooke	1,225	20	32.4	+3.8	68	29	−1	14	39	3.07	−0.40	1.20	23.2	7	2	6	23	w.	C. P. Waugh
Weston	Lewis	1,026	26	35.0	+1.5	82	29	2	14	48	4.00	−0.13	1.04	26.0	16	3	10	18	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	34.0		75	29	5	14	36	2.59	−0.35	1.06	6.4	15	6	1	24	s.	Miss M. B. Forsyth
Averages and	Extremes			35.3	+4.0	83	29	−6	13	55	3.22	−0.81	1.90	17.8	12	6	5	20	w.	
Southern Section.																				
Bancroft	Putnam	574	11	39.6	+5.1	80	28†	10	13†	55	2.74	−1.13	0.67	4.2	10	1	0	30	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	[b]37.6	+5.2	73	29	5	[b]13	[b]34	5.00	+1.42	1.80	24.0	8	9	0	22	w.	John A. Ewart
Bluefield	Mercer	2,558	20	[c]37.4	+3.7	74	[c]29	10	12†	[c]36	3.90	+0.90	1.30	15.0	5	13	2	16		Norfolk & Western Ry.
Charleston	Kanawha	597	29	43.5	+5.7	79	29	15	13	37	3.19	−0.36	0.65	3.5	9	6	7	18	w.	R. C. Hewes
Cuba	Jackson	650	14	38.0	+5.1	73	29	6	13	36	1.96	−1.31	0.56	6.7	6	5	12	14	nw.	C. T. Perry
Doane	Wayne		7	43.3		80	30	21	1†	41	2.53		1.00		5	9	9	13		L. A. Smith
Elkhorn	McDowell	1,933	22	39.0	+2.7	75	29	12	13	35	3.24	+0.29	1.01	13.3	5	5	12	14	w.	J. J. Lincoln
Green Sulphur Spgs	Summers	1,600	19	34.8	+2.3	73	29	1	14	41	3.26	+0.40	1.65	21.5	9	9	2	20	w.	Arthur George
Hinton	do	1,450	25	35.0	+0.5	74	29	8	14	42	2.93	0	0.98	25.0	11	8	0	23	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas		2	33.5		78	29	−5	13	45	4.38			23.0	11	4	2	25		R. E. Ferguson
Huntington	Cabell	538	19	37.5	+4.9	70	29	14	14	37	2.40	−1.12	0.78	2.5	8	9	1	21		L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	34.2	+2.5	70	29	1	14	38	3.96	+0.49	1.12	16.5	7	12	7	12	nw.	Geo. T. Argabrite
Madison	Boone	704	9	[g]37.5		79	[g] 29	10	[f] 13	[k]45	2.07		.72	4.0	6	[f] 6	[f] 2	[f] 17		S. E. Bradley
Marlinton	Pocahontas	2,131	18	31.7	+3.2	66	29	−4	14	40	2.51	−0.94	1.20	14.6	11	14	12	5		C. J. McCarty
Nuttallburg	Fayette	2,252	22	33.6	+2.1	63	29	3	13	30	2.89	−0.24	1.80	24.0	5	6	8	17		Miss Donna Tully
Point Pleasant	Mason	553	24	38.6	+5.2	74	29	9	13†	39	1.92	−1.59	0.58	T.	10	7	0	24	sw.	W. D. Holmes
Powellton	Fayette	933	17	39.3	+3.6	83	29	10	13†	40	3.76	+0.08			9	8	6	17		Morris Hansford
Princeton	Mercer	2,395	14	33.0	+1.3	66	29	4	14	36	4.35	−1.02	1.00	26.0	7	9	8	14	w.	H. Scott
Robertsburg	Putnam	574	14	36.6	+2.7	74	29	7	13	41	2.14	−1.43	0.70	3.0	7	9	1	21	w.	E. P. Turley
Ryan	Roane	700	11	37.4	+4.3	79	29	3	13	51	2.94	−0.91	0.94	14.1	14	8	4	19		Wm. E. Ryan
Spencer	do	784	16	37.9	+4.9	82	29	6	13	48	4.28	+0.23	1.75	8.5	8	0	16	15		A. M. McKown
Sutton	Braxton	839	11								2.47	−2.85		19.5	7	[f] 3	[f] 0	[f] 22		Ben Gillespie
Union	Monroe	2,250	10	34.6	+1.6	69	29	2	14	38	2.00	−1.91	1.40	18.0	5					Shelton Clark
Williamson	Mingo	660	13	36.0	0.0	76	29	12	13†	43	2.70	−1.03	0.60	2.5	8	8	5	18	w.	J. F. Keyser
Averages and	Extremes			36.9	+3.2	83	29	−5	13	55	3.02	−0.67	1.80	13.1	8	7	6	18	w.	
State Averages and	Extremes			35.8	+3.5	83	29	−11	14	55	3.18	−0.73	1.90	15.6	10	7	6	18	w.	

Estimated and incomplete data are not considered in means. All other records are used in determining section or division means, but the mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observation.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for January, 1914.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac	T.	T.	1.30	1.60	.17	T.	.10		.04	.04	T.	.30	T.		.25	T.	.20		.06	.05	.45	.30		.02	.32					T.	.45	5.65
Burlington	do			.90	.30																1.00				.20						.40	2.80
Harpers Ferry	do			.80	1.52	.46																			.46	.48					.29	4.01
Lost City	do			1.50								T.	T.					T.				.20			.14	.55					T.	.80	3.19
Martinsburg	do		*	*	*	2.35														.10	.08	T.			.80						.65	3.98
Moorefield	do	.25	T.	1.40	.20	T.									T.				T.			T.			T.	.63					.65	3.13
Romney	do																																
Upper Tract	do	T.		1.40	.10								T.									T.	T.		T.						.45	1.95
Northern Section.																																	
Bens Run	Ohio			1.03	.36																.33	.07		.50						.10	.69	3.08
Brandonville	Monongahela																																
Buckhannon	do	.10		1.00	.50		T.		.10	T.	.10	.20			T.	T.	T.			.30	.08	.48	.10		.10	.70					.10	.40	4.26
Cairo	Little Kanawha			.40	.20	.10	.05		.15	1.90	.10		.10			.14	.02	.07		.03			.10		.14	.43						.65	4.58
Central Station	Middle Is. Creek	.04		.98	.42	.18	T.	T.		T.	T.	T.	T.			T.		T.		T.	T.	.10	.05		.11	.25					.02	.37	2.52
Cheat Bridge	Monongahela		T.	.20	.50		T.				T.	T.			T.	T.		.40	T.			.60	T.			T.	.75				.20	.75	3.40
Cortland	do			1.60									.20			.40		.40			.80	1.00		.40	.32						.15	5.27
Creston	Little Kanawha	.12		.24	.10	T.	T.					T.	.03	T.				T.	T.		.10	.12	.02	T.		.50					T.	.48	1.71
Davis	Monongahela	.05		.25	.90	.30	T.				.05	.15	.25	.10		.20	.25	.05	.35	.05	.34	.48	.40	.10	T.	.15					.04	.15	4.61
Elizabeth	Little Kanawha	.08		.10	.75								.09									.05	.01		.01	.53						.71	2.33
Elkins	Monongahela	T.	T.	.40	.30	.04	T.	T.		.01	.01	.05	.05	T.	T.	.18		.13		.05	.16	.12	.04		.48	.02					.02	.25	2.31
Fairmont	do	.03		.75	.65	.38	.03		T.		.02	T.	.05	T.		.04	T.	.05	.02	.02	.02	T.	.19	T.		.50					T.	.16	2.91
Glenville	Little Kanawha	.23		.85	.23	.03															.12	.37	.10		.42						.37		2.72
Grafton	Monongahela	.20		.30	.40	.60				.03						.39		T.		.03	.28	T.	.06		.45							T.	2.74
Lost Creek	do	.05		.76	.18	T.				.03	T.	T.	T.			T.		T.		T.		.08	.04		T.	T.					.09	.78	2.01
Mannington	do	T.		1.52	.51	.18	.01		T.	.01	.02	.01	.06			.08		.04		.01	.03	.06	.18	T.	.07	.18					T.	.71	3.68
Morgantown	do			.51	.53	.18	T.				T.					T.						.02	.07		.12	.22					T.	.45	2.10
Moundsville	Ohio			1.29	.18	.04							.02			.08		T.		T.		.03	.05		T.	.27	T.					.61	2.57
New Cumberland	do			1.00	.20						T.	T.	T.	T.				T.				.20	T.		T.	T.	T.	.55					1.95
New Martinsville	do		*	1.32		.52															.15				.45						.82	3.26
Parkersburg	do	.02	.32	.18	.01	T.	T		T.	T.	T.	.02		T.	.07		T.	T.	.01		.02	.03		.32		T.					.21	.34	1.55
Parsons	Monongahela		.60	.80							.10					.30		.40		.10		.50	.20		.25	.20					.30	3.75
Philippi	do	.28	.02	.50	.74	.22	.06	.02		.01	T.	.02	.03	T.		.02	T.	.02		.02	.01	.13	.06		.02	.51					.07	.66	3.42
Pickens	do	.23		1.50	.10						.17	.20	.20			T.		.10	.23		.33	.42	.20	.64	.31						.80		5.43
Rowlesburg	do	.10		.12	.70	.34	.04				.04	.02	.04	.06		.08	.16	T.	.12	.02	.02	.30	.40	.06		.54						.02	.12	3.30
Saint Marys	Ohio			.50	.50	.46						.02		T.	T.	T.						.15	T.							.40		.02	.60	2.65
Smithfield	Fishing Creek	.05		1.49	.80	.09						.10	.10	.10				.10	T.	T.	.10	.10	.10	T.		.52					T.	.78	4.43
Terra Alta	Monongahela																																
Wellsburg	Ohio			1.20	.80								.10					T.			T.	.02	.10		T.	.10					T.	.75	3.07
Weston	Monongahela	.28		1.04	.60	.20	T.	T.				.04	.04	.06				.04		.06	.10	.20	.06	T.	.50	.38					.10	.30	4.00
Wheeling	Ohio	T.		.32	1.06	.20			T.			T.	.04		T.	.04		.01	.01	.01	.02	.01	.15	.01		.25	T.	.01				.45	2.59
Southern Section.																																	
Pancroft	Great Kanawha	.25		.65	.20	.12	.02							T.								.10	T.		.05	.60					.08	.67	2.74
Beckley	do	.20		1.80	.30					.90	1.10	T.										.10			.25						.35		5.00
Bluefield	do			1.30	.20																	1.00			.90						.50	3.90
Charleston	do	.20		.65	.58	.20						T.	T.	T.					.02			.24				.58					.10	.62	3.19
Cuba	Sand Creek			.41	.26		T.		T.		T.	T.	T.					T.		T.		T.	T.		.40	.28					.05	.56	1.96
Doane	Big Sandy	1.00																							.47	.09					.35	.62	2.53
Elkhorn	do	.33		1.00	T.							T.						T.				T.			1.01	.60					.30		3.24
Green Sulphur Spgs.	Great Kanawha	.28		1.65	.10						T.	.02	T.								.22				.14	.44					.11	.30	3.26
Hinton	do	.26		.98	.36	.08					.02							T.	T.			.10	.04		.02	.46					.06	.55	2.93
Holcomb	do	.20		*	2.02							*	.20								.43	*	.10		.10	.80					.53		1.38
Huntington	Ohio	.12		.22	.28	.12																.24	T.			.58					.06	.78	2.40
Lewisburg	Great Kanawha	.40		1.05	.20							T.	T.									1.12			.94						.08	.17	3.96
Logan	Guyandotte																																
Madison	Great Kanawha	.10			.32	.20					T.	T.	T.								.03			T.	T.	.70						.72	2.07
Marlinton	do		.10	1.20	.10													.01			.03	.08	.05		.16	.18					.10	.50	2.51
Nuttallburg	do	.30		1.80	.30																	T.			.32						.17		2.89
Point Pleasant	Ohio	.10		.22	.20	.14							.02	T.							.08	*	.02	T.		.54					.02	.58	1.92
Powellton	Great Kanawha			*	*	2.20							*					.05			T.				.85	.06					.35	.25	3.76
Princeton	do	.50	.80	1.00	.20							.10													1.00						.75		4.35
Robertsburg	do	.20		.30	.30	.14		T.	T.			T.	T.									T.	T.		.05	.45					T.	.70	2.14
Ryan	do	.12		.94	.20	.05	.02	T.		T	T.	.01	.01					.03		T.	.03	.23	T.		.31	.17					.17	.65	2.94
Spencer	Little Kanawha	.20		.25	.40					1.75	T.	T.	T.							T.		.26	T.		.58						.07	.77	1.28
Sutton	Great Kanawha	.20		.75	*	1.00							T.							T.	T.	.20	.02								T	.30	2.47
Union	do	.20		1.40	.20																				.10						T.	.10	2.00
Williamson	Big Sandy	.22		.36	.30	.16																.38				.50					.18	.60	2.70

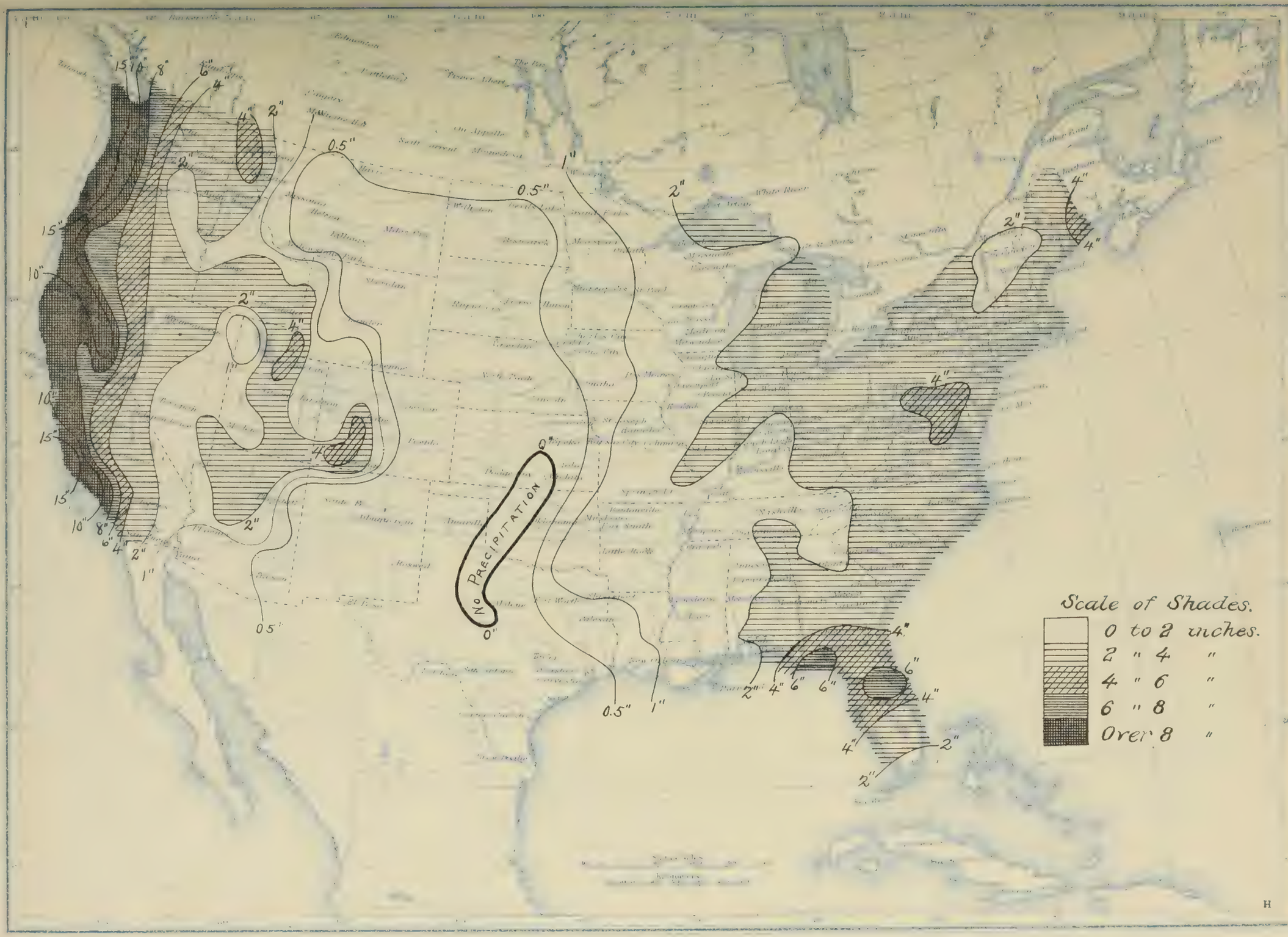
‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.

Daily Temperatures for January, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	35	31	32	32	30	30	28	43	46	43	26	22	11	32	34	42	42	29	40	51	51	23	52	51	47	43	57	62	72	70	47	40.5
	Minimum	22	15	27	28	27	26	24	25	30	25	17	6	1	11	16	18	25	15	28	32	22	18	12	33	20	15	25	33	26	31	31	21.4
Burlington	Maximum	34	36	38	39	39	40	36	52	51	45	34	33	21	26	42	54	46	35	50	43	40	35	44	40	41	41	53	67	64	62	57	43.0
	Minimum	15	13	29	32	32	22	22	27	24	32	22	13	10	3	15	26	30	23	23	28	30	24	19	28	27	21	25	29	29	34	34	23.9
Lost City	Maximum	32	28	36	34	36	36	34	46	42	46	31	28	16	24	40	46	42	44	42	52	38	48	46	50	18	42	50	56	60	70	62	42.1
	Minimum	22	18	28	33	32	24	20	28	26	31	24	12	8	10	22	26	30	21	26	36	28	28	26	40	26	28	33	36	45	40	36	27.2
Martinsburg§	Maximum	37	33	39	35	40	43	36	50	51	41	34	34	20	25	45	48	43	34	38	48	45	35	44	42	35	45	55	55	62	60	49	42.0
	Minimum	21	24	24	32	33	30	29	31	29	30	29	22	11	4	5	20	30	24	24	28	35	21	26	30	29	27	27	30	32	34	35	26.1
Moorefield	Maximum	33	32	32	34	33	35	36	34	30	35	33	30	20	22	38	44	52	34	48	46	42	34	45	46	30	34	60	65	72	70	48	40.2
	Minimum	26	20	28	32	30	18	26	28	26	27	29	16	16	3	22	28	34	27	21	32	28	25	21	27	28	25	34	52	36	48	34	27.3
Upper Tract	Maximum	35	33	34	35	37	42	38	40	55	50	31	25	20	35	41	50	50	39	47	62	60	60	55	55	50	52	56	71	75	70	56	47.1
	Minimum	25	16	25	30	27	10	19	22	29	30	23	13	9	1	23	30	30	19	23	36	28	25	26	39	27	25	28	43	38	52	37	26.1
Northern Section.																																	
Ben's Run	Maximum	33	40	36	34	35	34	33	46	46	40	33	31	20	36	44	47	44	32	44	49	51	31	59	52	34	50	62	67	70	50	47	42.9
	Minimum	27	26	32	33	31	31	30	30	30	32	26	14	10	8	32	30	30	20	30	37	28	25	24	34	28	27	34	36	37	37	34	28.5
Buckhannon	Maximum	34	40	37	35	32	33	31	47	47	64	30	26	18	36	42	38	37	32	45	60	55	32	58	55	58	51	54	67	79	60	60	44.9
	Minimum	29	15	30	30	30	29	26	29	25	28	21	11	4	2	28	30	30	20	26	37	24	21	20	40	26	26	33	34	31	40	30	26.0
Central Station	Maximum	32	40	38	34	34	33	32	47	46	43	32	29	19	37	43	47	46	32	44	61	56	33	61	54	45	57	68	74	78	..	55	45.0
	Minimum	29	24	32	32	30	30	29	29	30	31	23	15	5	1	27	28	30	17	29	37	27	24	22	38	27	25	33	38	35	..	33	26.9
Creston	Maximum	34	44	40	36	35	35	34	53	48	46	36	34	29	49	52	52	50	39	42	64	57	46	63	55	49	57	70	68	74	49	48	48.0
	Minimum	29	19	32	32	32	32	31	30	27	33	27	17	6	7	31	29	33	18	32	39	28	26	29	35	30	26	34	33	32	39	35	28.5
Elkins	Maximum	35	36	35	31	31	31	32	52	50	32	28	28	14	40	38	47	35	32	50	60	46	30	60	54	33	51	65	71	78	54	59	43.2
	Minimum	29	22	30	30	29	28	26	32	31	28	18	8	5	1	29	24	25	21	27	46	24	22	22	32	25	33	36	45	36	45	32	27.1
Fairmont§	Maximum	35	42	34	34	35	33	35	47	45	34	30	24	19	41	40	45	35	31	43	57	34	30	60	55	30	54	65	71	81	50	52	42.6
	Minimum	24	22	24	32	31	31	29	29	28	33	23	23	8	3	4	27	30	22	23	26	34	23	24	26	27	25	28	36	35	35	35	25.8
Glenville	Maximum	45	47	44	43	52	37	33	52	50	45	35	30	29	40	40	50	49	48	45	51	38	32	64	52	49	50	70	72	80	65	58	48.2
	Minimum	30	22	30	29	30	30	30	30	24	30	24	17	8	4	24	24	30	29	30	35	24	25	23	27	32	27	35	32	35	32	24	26.6
Grafton	Maximum	38	43	38	35	35	34	33	50	50	45	32	29	22	42	43	47	47	32	46	60	60	30	62	63	52	53	62	71	76	69	58	47.0
	Minimum	30	32	32	32	32	32	30	31	27	25	26	16	8	2	27	28	31	23	26	37	27	25	25	35	27	28	37	35	33	38	35	28.1
Lost Creek	Maximum	31	41	36	32	31	31	32	41	46	42	29	27	17	39	41	45	43	29	45	58	52	28	59	54	45	53	64	68	79	62	56	43.7
	Minimum	26	16	28	29	28	28	23	26	32	28	20	12	3	1	13	24	27	15	25	25	24	21	16	40	25	21	30	36	28	35	31	23.7
Mannington	Maximum	37	41	39	34	34	33	32	46	48	43	31	29	19	34	42	45	45	30	44	44	48	28	60	52	44	50	65	68	79	67	51	43.9
	Minimum	28	23	31	31	30	31	29	30	23	31	26	14	6	−5	22	25	30	19	25	34	26	23	16	32	26	24	32	32	30	35	33	25.5
Morgantown	Maximum	41	37	35	34	34	33	33	44	48	44	30	28	16	36	41	45	..	30	43	56	55	27	59	55	40	45	63	69	79	66	37	43.4
	Minimum	26	28	30	32	30	30	29	30	41	29	22	12	8	3	32	31	..	21	27	40	25	21	24	39	25	25	40	55	59	37	32	29.4
New Cumberland	Maximum	32	37	34	34	36	30	30	45	42	38	28	24	18	30	37	40	40	28	37	42	41	28	55	51	35	35	61	62	70	60	46	39.5
	Minimum	12	22	30	30	28	23	27	28	28	27	22	9	4	−5	24	30	26	18	27	37	25	20	21	35	24	22	34	45	48	45	32	25.7
New Martinsville	Maximum	35	48	41	35	38	36	37	49	48	47	37	36	32	38	45	48	50	34	42	50	59	32	62	52	41	50	66	72	75	57	52	46.6
	Minimum	26	24	32	32	31	31	31	32	30	32	29	16	11	6	31	29	30	21	29	36	28	26	22	36	27	27	33	35	39	39	35	28.6
Parkersburg	Maximum	35	40	35	34	34	34	34	51	51	37	30	32	22	45	47	53	39	34	46	63	42	34	61	55	33	52	64	67	73	53	47	44.4
	Minimum	27	29	32	32	30	30	31	34	36	30	25	14	12	12	34	34	28	22	32	42	28	26	30	32	28	30	45	50	49	37	34	30.8
Parsons	Maximum	39	38	37	32	32	31	32	47	46	43	29	27	14	34	32	45	42	32	40	48	48	21	57	45	41	49	64	61	80	55	40	41.3
	Minimum	25	16	31	29	29	28	27	27	21	28	20	9	6	5	21	20	28	17	16	33	19	16	15	30	25	24	28	29	29	34	33	22.8
Philippi	Maximum	37	41	38	34	34	35	32	45	47	47	32	29	17	36	42	48	48	32	45	59	57	32	60	57	49	52	65	67	82	62	57	45.7
	Minimum	30	21	31	31	30	30	28	30	25	32	23	13	9	3	25	26	28	21	24	38	26	23	23	38	26	25	32	38	36	32	33	26.8
Pickens	Maximum	36	37	33	29	28	28	30	45	43	36	24	23	14	42	36	41	36	39	42	51	18	30	57	46	40	39	61	64	80	59	57	41.1
	Minimum	26	29	27	26	25	24	23	28	35	23	16	7	−6	−3	21	21	10	10	37	37	20	17	24	21	23	29	37	38	46	38	28	23.8
Wellsburg	Maximum	32	36	33	32	33	30	29	41	42	35	26	23	14	38	36	40	40	31	37	46	46	27	52	48	33	36	58	61	68	59	45	38.9
	Minimum	14	23	30	30	27	24	26	29	35	26	21	9	4	1	34	27	27	18	25	36	25	20	23	33	23	24	34	46	47	35	32	26.0
Weston	Maximum	32	42	38	36	32	34	38	48	50	38	30	24	20	44	46	48	36	40	50	60	38	44	60	42	40	52	64	68	82	52	48	44.4
	Minimum	24	18	20	24	30	24	28	26	28	34	28	22	8	2	8	12	28	18	28	38	30	24	28	30	28	26	36	36	34	40	36	25.7
Wheeling§	Maximum	32	39	34	35	38	32	37	48	43	33	29	23	22	35	43	45	34	32	41	45	34	37	51	45	35	48	64	66	75	49	46	41.1
	Minimum	19	19	30	32	31	28	28	30	34	27	25	20	7	5	7	30	31	23	22	31	31	24	25	36	26	27	34	37	39	41	35	26.9
Southern Section.																																	
Beckley	Maximum	45	35	37	37	31	32	35	48	49	55	55	55	30	40	39	39	39	38	55	65	30	54	68	60	60	43	62	70	73	64	65	48.7
	Minimum	31	30	31	34	30	31	32	31	30	25	23	21	5	30	15	14	31	30	31	..	..	..	..	..	..	..	..	..	..	..	..	26.6
Bluefield	Maximum	38	39	30	29	30	30	31	32	42	47	32	28	46	46	46	50	46	..	45	60	56	39	58	..	..	..	55	60	73	74	70	64	46.3
	Minimum	27	26	26	23	25	25	25	26	25	30	20	10	12	10	32	32	30	..	21	44	26	21	33	..	..	26	40	45	52	53	31	28.4
Charleston	Maximum	37	46	44	36	35	36	37	53	56	56	38	36	27	48	51	58	57	40	51	70	69	66	66	67	54	57	68	73	79	72	53	52.8
	Minimum§	31	34	34	34	32	34	32	34	35	36	29	25	15	16	38	35	37	25	36	47	33	29	33	45	31	32	41	41	42	50	45	34.2
Elkhorn	Maximum	38	38	34	32	29	28	30	50	50	48	41	30	28	45	50	53	53	40	48	60	60	38	57	54	42	54	61	72	75	70	64	47.5
	Minimum	28	32	26	26	28	28	28	24	38	32	19	19	12	15	32	31	32	22	38	48	28	25	30	40	30	31	37	37	45	50	32	30.5
Green Sulphur Spgs.	Maximum	36	36	34	33	34	32	33	43	39	44	33	31	25	36	40	48	49	36	36	53	38	56	56	51	47	53	60	69	73	64	64	44.6
	Minimum	29	29	30	29	27	28	27	18	15	31	23	6	4	1	20	21	32	9	28	28	24	33	19	33	27	25	35	28	34	47	36	25.0
Hinton§	Maximum	37	35	34	34	33	33	34	41	48	38	31	32	30	37	49	48	37	37	39	62	38	42	57	53	38	54	57	65	74	67	53	44.1
	Minimum	28	31	30	29	30	30	29	24	22	23	23	13	9	8	9	25	29	20	20	31	35	25	23	23	30	28	28	30	32	34	48	25.8
Holcomb	Maximum	33	36	32	32	30	31	31	53	44	32	28	29	22	45	47	44	33	37	43	58	31	34	61	49	36	55	63	70	78	63	52	43.1
	Minimum	27	25	29	27	26	26	25	21	22	25	20	10	5	0	5	24	27	18	24	33	32	20	22	23	32	25	30	30	31	39	45	23.9
Huntington§	Maximum	35	41	36	36	35	36	39	45	55	38	34	29	28	47	50	50	40	42	55	67	35	44	60	50	34	54	60	69	70	47	42	45.3
	Minimum	29	28	29	33	31	32	31	31	32	32	27	26	15	14	15	32	37	25	25	38	35	28	28	40	30	30	30	32	36	37	36	29.7
Lewisburg	Maximum	37	35	33	33	34	32	32	46	43	45	30	28	22	35	42	43	45	35	38	58	53	35	53	58	45	50	56	67	70	64	62	43.8
	Minimum	28	28	28	27	24	26	15	15	29	21	8	6	1	21	23	30	15	26	35	26	22	18	38	26	23	28	29	32	47	35	24.5
Madison	Maximum	..	..	45	45	33	38	46	51	53	38	33	32	31	..	33	57	40	39	43	48	46	40	61	57	..	..	66	72	..	79	..	46.9
	Minimum	29	..	..	32	31	29	32	33	35	34	29	23	10	12	..	29	25	21	22	38	32	28	25	32	29	..	..	27	32	..	33	28.1
Marlinton	Maximum	34	30	34	33	35	38	38	45	42	40	30	24	22	30	40	43	40	33	36	52	48	32	48	44	40	48	52	58	66	56	57	41.9
	Minimum	30	29	28	28	24	24	20	26	19	28	12	10	−1	−4	19	28	28	9	27	33	24	21	17	30	26	20	22	26	26	34	33	22.5
Point Pleasant	Maximum	34	40	40	45	36	36	36	55	54	50	35	33	27	44	52	56	50	37	47	67	63	48	62	57	45	55	65	72	74	60	46	48.4
	Minimum	28	24	31	31	29	30	29	31	29	32	25	17	9	9	34	29	34	18	31	40	29	25	27	38	29	27	36	35	35	36	33	28.7
Powellton	Maximum	36	40	36	34	33	33	35	43	50	44	36	34	26	43	53	55	53	40	48	66	60	44	64	56	40	56	60	74	83	58	60	48.2
	Minimum	29	32	32	32	30	30	30	24	30	32	20	23	10	10	32	28	33	25	33	44	25	28	26	40	30	32	39	36	43	47	36	30.4
Robertsburg	Maximum	39	40	35	34	34	34	37	54	64	36	34	29	25	47	50	56	58	41	52	66	34	34	62	52	38	58	66	73	74	48	47	46.2
	Minimum	26	22	24	32	30	30	30	30	34	27	24	7	8	9	29	34	18	19	34	33	26	26	28	29	28	30	34	33	34	37	26.9
Ryan	Maximum	53	47	38	32	33	33	33	50	51	50	32	30	25	43	49	55	50	36	48	67	58	46	62	57	46	55	67	72	79	60	50	47.3
	Minimum	20	28	31	31	31	32	30	29	28	32	28	18	3	6	30	31	32	15	31	38	28	26	24	31	29	28	33	32	28	35	33	27.5
Spencer§	Maximum	35	41	41	34	34	32	40	58	39	36	31	26	30	41	42	42	48	46	56	63	32	38	64	56	68	52	77	78	82	50	48	47.4
	Minimum	28	21	32	32	31	31	30	30	27	27	27	23	6	7	30	27	34	16	31	39	32	26	24	34	30	29	32	33	34	36	39	28.4
Union§	Maximum	56	33	34	32	32	31	31	45	43	40	35	30	25	38	44	45	33	34	46	60	35	38	56	50	49	59	55	64	69	66	65	43.6
	Minimum	30	28	28	28	28	26	16	23	31	28	12	8	2	6	26	32	21	18	31	24	23	20	34	25	24	29	29	36	48	49	25.5
Williamson§	Maximum	32	38	40	33	32	32	36	49	52	37	30	33	30	46	50	57	38	37	48	65	37	40	59	49	39	54	62	71	76	50	47	44.8
	Minimum	28	26	29	30	28	28	29	26	26	30	27	19	12	12	16	27	30	22	24	35	36	26	25	25	30	30	29	34	33	33	40	27.3

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, January, 1914.



U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

FEBRUARY, 1914

BY
HENRY C. HOWE
SECTION DIRECTOR

CLEVELAND, OHIO
WEATHER BUREAU OFFICE
APRIL 11, 1914

Departure of the Mean Temperature from the Normal, February, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

VOL. XXII. PARKERSBURG, W. VA., FEBRUARY, 1914. NO. 2.

GENERAL SUMMARY.

February was much colder and somewhat wetter than usual. The February temperatures averaged lower, however, in six of the past 24 years of record. The February precipitation was heavier in eight of the years of the same period. The snowfall was the heaviest of record for February and the heaviest of record for any month for the past 20 years. There was a slight excess of sunshine. The rivers were low or at moderate stages. Navigation on the Ohio river was impeded by running ice.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.19 inches. The highest and lowest pressures observed were as follows: Parkersburg, 30.70 inches on the 12th and 29.54 inches on the 6th; Elkins, 30.68 inches on the 26th and 29.60 inches on the 7th. Areas of low pressure crossed the State on the 2-3d, 6-7th, 10-11th, 13th, 18-19th, and 27-28th. The pressures were abnormally high on the 9th, 11-12th, and 21st-27th.

TEMPERATURE.

The monthly mean of the section, 52 stations reporting, was 28.4°, or 3.3° below the normal. There were only two or three short periods with temperatures near or below zero, but the temperatures were deficient nearly all the month. From the 1st to 7th, however, slight plus departures were general. The readings on the 18th and 22d were also near or slightly above the normal. Zero temperatures occurred in many sections on the 17th. Over the northern and central sections the readings on the 25th ranged from near zero to 22° below zero. In only two years of record were lower temperatures recorded in February. The readings were the lowest of record for any spring after February 15th.

HUMIDITY.

The averages of the humidity readings at 8 a. m. and 8 p. m. at Parkersburg and Elkins, with departures from the normals, were as follows: Parkersburg, 8 a. m., 79 per cent; 8 p. m., 66 per cent. Averages for 25 years, 80 and 72 per cent. Elkins, 8 a. m., 79 per cent; 8 p. m., 70 per cent. Averages for 15 years at 8 a. m., 85 per cent; 8 p. m., 13 years, 74 per cent.

PRECIPITATION.

The average for the section, 59 stations reporting, was 3.64 inches, or 0.49 of an inch above the normal. The snowfall averaged 19.7 inches, or 10.1 inches above the normal. This was the greatest fall of record for February. The precipitation was well distributed over the State and throughout the month. The wet periods were from the 5-7th, 12-16th, 19-20th, and 23d-24th. In the more elevated sections from 1 to about 7 inches of snow fell from the 4th to 8th. Light to moderate snow also fell in most sections from the 9th to 11th. Heavy snow, ranging generally from 6 to more than 12 inches fell from the 13th to 16th. The snowfall on the 23d-24th ranged generally from 8 to 12 inches over the northern and central sections.

WIND.

The average wind velocity at Parkersburg was 7.4 miles per hour, or normal as compared with the average for February for the past 23 years. The average at Elkins was 5.2 miles. The February average for 15 years is 5.6 miles. The highest velocity at Parkersburg was 35 miles an hour on the 16th. At Elkins, 24 miles on the 7th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 47 per cent of the possible amount, or 11 per cent above the average for February for the past 16 years. The average at Elkins was 36 per cent, or 1 per cent above the February average for the past 14 years.

MISCELLANEOUS PHENOMENA.

Dense fog: New Cumberland, 26th.

Halos, lunar: Elkins, 2d; Lost City, 4th; Parkersburg, 5th.

Halos, Solar: Elkins, 27th; Lost City, 25th; Wellsburg, 12th.

Haze, light: Bayard, 12th, 26th, and 27th.

Sleet: Charleston, 23d; Holcomb, 13th and 23d; Huntington, 23d; Nuttallburg, 13th and 19th; Parkersburg, 19th; Philippi, 19th; Powellton, 23d; Princeton, 19th; Wheeling, 19th.

Thunderstorms: Princeton, 19th; Robertsburg, 6th.

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in inches.
1891	38.1	..	....	5.39	....
1892	37.1	72	12	2.30	....
1893	35.0	71	− 6	4.81	....
1894	33.4	71	− 5	3.99	....
1895	22.8	79	−17	1.27	....
1896	33.4	62	− 5	3.31	....
1897	36.8	70	3	5.95	....
1898	32.7	74	−13	1.84	....
1899	26.1	69	−35	4.32	19.0
1900	30.7	83	−11	3.94	10.1
1901	27.1	62	− 6	0.86	4.1
1902	26.7	68	−14	3.20	8.1
1903	35.3	74	−19	5.99	8.6
1904	29.3	80	−13	2.37	8.1
1905	25.6	56	22	2.34	8.1
1906	32.4	79	−11	1.60	8.1
1907	31.1	68	−23	2.55	11.1
1908	30.9	72	−10	3.72	15.8
1909	40.4	80	− 5	4.16	3.4
1910	31.5	72	−11	3.18	13.5
1911	38.7	76	6	2.03	4.8
1912	27.3	70	−17	2.45	6.4
1913	32.6	80	− 4	2.27	4.7
1914	28.4	70	−22	3.64	19.7
Entire period	31.8	83	−35	3.23	9.6

Climatological Data for February, 1914.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	24.0	−3.2	52	3	−21	25	60	3.89	+0.46	1.00	31.2	13	5	7	16	w.	Solomon Clark
Burlington	Mineral	875	20	26.0	−3.9	53	1	−16	25	47	3.90	+1.47	1.90	28.0	8	9	14	5	nw.	J. W. Vandiver
Franklin	Pendleton		6	27.6		55	5	5	17	33						12	9	7		Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25								2.18	−0.36	0.80	15.2	7				w.	S. W. Lightner
Lost City	Hardy		7	27.4		60	1	− 8	26	38	2.03		0.60	20.0	6	5	12	11	w.	B. D. Hinegardner
Martinsburg	Berkeley	435	22	25.2	−4.5	50	1†	Zero	26	47	3.15	+0.75	1.10	22.0	8	15	5	8	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	19	26.4	−5.2	50	18†	−10	25	43	2.70	+0.27	1.20	27.0	6	5	14	9	nw.	John C. Fisher
Upper Tract	Pendleton	1,230	16	30.1	−1.7	56	4†	−11	25	52	2.21	−0.32	0.70	12.0	6	1	21	6	w.	J. M. Mallow
Averages and	Extremes			26.7	−3.7	60	1	−21	25	60	2.87	−0.48	1.90	22.2	8	7	12	9	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	27.4	−3.5	55	6	− 4	25	38	4.34	+0.87	1.38	41.0	10	20	3	5		J. D. Riggs
Brandonville	Preston	1,809	3								2.39		0.96							W. T. Miller
Buckhannon	Upshur	1,411	24	27.6	−3.4	58	4	−13	25	48	4.38	+0.62	1.40	16.5	9	12	1	15		H. A. Darnall
Cairo	Ritchie	674	12	28.2	−4.3	58	3	−17	25	43	5.27	+1.89	2.04	23.0	10	3	16	9	w.	Van A. Zevely
Central Station	Doddridge	950	12	28.6	−1.6	64	2†	−18	25	57	2.75	−0.23	0.93	21.0	10	7	10	11	w.	G. W. Sherwood
Cheat Bridge	Randolph	3,600	1								3.02		0.80		14					Franz A. Degler
Cortland	Tucker	3,300	1								3.81		0.89	17.0	8					Samuel Harman
Creston	Wirt	701	13	30.4	−1.3	62	2†	−11	25	47	3.78	+1.18	1.20	19.2	12	8	5	15	w.	J. M. Reed
Davis	Tucker	3,093	7								6.25		1.85	33.5	18				sw.	Ross C. Male
Elizabeth	Wirt	646	3								4.00		1.18		13					E. D. Ball
Elkins	Randolph	1,940	15	28.0	−3.3	58	3	−10	25	51	2.72	−0.45	0.91	13.4	14	5	8	15	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	26.4	−7.2	59	2	−11	25	55	4.19	+1.28	0.88	23.0	13	13	2	13	n.	F. P. Hall
Glenville	Gilmer	738	25	30.5	−1.1	62	3	−12	25	52	4.41	+0.60	1.42	22.0	8	5	9	14	w.	Joe N. Craddock
Grafton	Taylor	1,000	22	29.7	−1.3	62	3	−14	25	56	4.62	+1.45	1.34	27.0	14	15	0	13	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	25.0	−5.3	58	3	−22	25	57	2.62	−0.46	1.21	17.5	7	10	6	12	w.	Allen Smith
Mannington	Marion	974	12	26.6	−3.6	55	2	−20	25	56	2.92	+0.45	1.20	16.6	12	10	6	12	w.	Jas. A. Morgan
Morgantown [a]	Monongalia	1,250	29	27.0	−4.1	58	18	−10	25	50	1.68	−1.57	0.40	13.8	7	0	13	14		Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	26.6	−4.9	57	3	−10	25	45	1.63	−0.62	0.60	13.9	11	13	1	14	sw.	M. L. Brown
New Cumberland	Hancock	987	15	22.0	−5.2	50	3	−14	25	53	2.55	−0.01	1.80	14.0	5	10	2	16	n.	Frank S. Evans
New Martinsville	Wetzel	634	21	28.4	−3.4	57	6	− 8	25	45	3.20	+0.20	1.35		6	10	5	13	s.	Wm. Ankrom
Parkersburg	Wood	638	26	27.6	−6.1	55	2	− 7	25	38	3.74	+0.50	1.26	23.4	13	11	9	8	n.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	26.7	−2.1	57	2	−15	25	57	3.16	−0.20	1.00	17.5	9	10	7	11		J. W. Swisher
Philippi	Barbour	1,149	22	28.1	−3.0	56	7	−22	25	59	4.19	+0.88	1.43	28.4	16	6	13	9	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	28.0	−3.7	55	3	− 1	25	46	6.96	+2.25	3.40	23.0	14	9	7	12	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29								4.64	+1.41	1.10	23.2	17				w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7								4.39		1.20	29.0	9				s.	J. O. Goodman
Smithfield	Wetzel	835	10	25.6		65	6	−20	25	65	4.83	+1.73	1.74	27.0	13	10	10	8	n.	G. M. Whisler
Terra Alta	Preston	2,612	14																	Prof. Wm. R. Shaw
Wellsburg	Brooke	1,225	20	22.4	−4.5	50	3†	− 6	24†	38	3.24	+0.32	0.90	22.5	12	10	6	12	w.	C. P. Waugh
Weston	Lewis	1,026	26	27.4		58	2†	−12	25†	56	5.22	+1.53	1.64	26.6	15	4	10	14	n.	Miss C. M. Davis
Wheeling	Ohio	645	30	24.4		53	2†	− 8	25†	52	3.54	−0.02	0.92	23.5	14	12	5	11	nw	Miss M. B. Forsyth
Averages and	Extremes			27.1	−3.5	65	6	−22	25	65	3.82	−0.57	3.40	22.2	11	8	7	12	w.	
Southern Section.																				
Bancroft	Putnam	574	11	32.3	−0.8	70	3	4	17†	51	3.47	+0.58	1.15	9.8	11	7	0	21	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	n30.8	−1.2	68	3	4	n 25	n35	3.78	+0.68	1.15	15.0	8	6	0	22	w.	John A. Ewart
Bluefield *	Mercer	2,558	20	c33.8	+0.7	61	c 3	8	d 17	d42	2.10	−1.11	1.00	15.0	5	c 10	c 2	c 13		Norfolk & Western Ry.
Charleston [a]	Kanawha	597	29	35.2	−3.0	64	3	11	25	41	3.74	+0.19	0.66	14.5	13	14	3	10	w.	R. C. Hewes
Cuba	Jackson	650	14	27.3	−4.6	56	6	−19	25	52	3.94	+0.87	1.40	21.5	8	9	13	6	nw.	C. T. Perry
Doane	Wayne	717	7								4.82		1.65		8	4	11	13		L. A. Smith
Elkhorn	McDowell	1,933	22	34.2	−1.2	60	3†	6	17	41	3.19	+0.10	0.67	12.2	10	5	16	7	w.	J. J. Lincoln
Green Sulphur Spgs	Summers	1,600	19	30.8	−1.2	61	3	− 9	17	60	2.77	+0.36	0.70	15.0	11	9	7	12	w.	Arthur George
Hinton	do	1,450	25	31.3	−2.9	62	3	Zero	17	50	4.12	+1.10	1.22	19.0	14	11	1	16	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	29.5		62	3	− 7	17	58	2.66			15.0	12	9	2	17		R. E. Ferguson
Huntington	Cabell	538	19	29.8	−2.1	58	6	7	25	42	4.34	+1.16	1.18	10.0	12	8	2	18	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	29.6	−1.8	58	3	− 3	25	46	4.71	+0.84	1.00	26.5	11	14	5	9	nw.	Geo. T. Argabrite
Madison	Boone	704	9	d33.0		65	d 3	5	e 25	f42	3.42		1.60	6.0	6	c 5	c 2	c 18		S. E. Bradley
Marlinton [b]	Pocahontas	2,131	18	27.6	−1.6	54	3	− 6	17	48	3.19	+0.37	0.73	20.0	11	13	8	5		C. J. McCarty
Nuttallburg [c]	Fayette	2,252	22	25.9	−6.2	50	22	3	25	44	2.66	−0.16	1.20	21.0	7	9	7	7		Miss Donna Tully
Point Pleasant	Mason	553	24	28.7	−4.4	58	2†	−17	25	50	4.56	+0.99	1.64	18.0	12	8	2	18	nw.	W. D. Holmes
Powellton [a]	Fayette	933	17	34.0	−0.8	66	2	2	17	56	2.27	−0.74				10	3	15		Morris Hansford
Princeton	Mercer	2,395	14	28.9	−2.9	54	3	2	17	47	4.60	+0.51	1.00	32.0	11	10	12	6	w.	H. Scott
Robertsburg	Putnam	574	14	27.4	−5.5	59	2	− 4	25	52	4.05	+0.91	1.57	11.0	10	7	0	21		E. P. Turley
Ryan	Roane	700	11	28.3	−4.8	62	3	− 8	17	57	3.65	+0.41	1.21	15.7	13	7	7	14		Wm. E. Ryan
Spencer	do	784	16	28.1		65	2	−13	25	49	4.74	+1.72	1.14	13.0	9	1	14	13		A. M. McKown
Sutton	Braxton	839	11	d33.1		62	d 3	− 4	d 25	b57	2.75	0.45	1.00	14.0	8	a 5	a 6	a 16		Ben Gillespie
Union	Monroe	2,250	10	30.2	−2.8	58	1†	1	17	47										Shelton Clark
Williamson	Mingo	660	13	30.4	−6.0	60	3	7	17	45	2.98	−0.25	0.92	5.5	11	9	4	15	w.	J. F. Keyser
Averages and	Extremes			30.3	−3.0	70	3	−19	25	60	3.65	+0.48	1.65	15.8	10	8	6	13	w.	
State Averages and	Extremes			28.4	3.3	70	3	−22	25	65	3.64	+0.49	3.40	19.7	10	8	7	12	w.	

Estimated and incomplete data are not considered in means. All other records are used in determining section or division means, but the mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observation.

Reference letters, [a] [b] [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for February, 1914.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac	T.			.05	.35	.15	.14	.07		T.	.10		.10	.40	T.	.20			1.00	.13			.80	.40								3.89
Burlington	do					.40	.40				.10			.60	.30					*	.20			1.90									3.90
Harpers Ferry	do					T.	.46	.31				.02			.80		.04					T.		.05	.50							2.18
Lost City	do					.10	.23				T.				.40	.50	.20							.60									2.03
Martinsburg	do					.10	.70				.08			*	1.10		.15			.27				.75									3.15
Moorefield	do					T.	.25	T.		T.			.10	.60	.40		.15							1.20	T.								2.70
Upper Tract	do					.10	.55							.33						.18				.35	.70								2.21
Northern Section.																																	
Bens Run	Ohio			.05		.46		.06			.23			.45	.20		.06		.20	1.38				1.25									4.34
Brandonville	Monongahela							.49							.58					.96				.36									2.39
Buckhannon	do					.53	.10	.10	T.		T.	T.		.25	.50		.10		.50	1.40				.90									4.38
Cairo	Little Kanawha			.04		.34	.07	.16	.10						.80		.20			2.04			.32	1.20									5.27
Central Station	Middle Is. Creek		T.	T.	.25	T.	.05	.02		.05	T.			.10	.77		.10		.08	.93			T.	.40	T.							2.75
Cheat Bridge	Monongahela	.10			.08	.12	.10	.06		T.	.10	.44		.10	.15	.55	.20		.80		T.			.02	.20								3.02
Cortland	do		.18		.32	.40		.32						.50						.40	.89			.80									3.81
Creston	Little Kanawha	.25			T.	.10		.21	.03			.04	T.	.10	.45	T.	.10			1.00	.30			.40	.80								3.78
Davis	Monongahela	.18		.02		.35	.05	.80	.20	.20		.15		.05	.50	.45	.30	.20		1.85	.05	.05		.40	.45								6.25
Elizabeth	Little Kanawha	.03			.04	.27			.14	.02			.12	.03	.83		.16			1.18	.32			.32	.54								4.00
Elkins	Monongahela	T.			.05	.45	.18	.09	T.	T.	.02	.03		.28	.19	.05	.09	T.	.16	.76		T.		.36	.01								2.72
Fairmont	do	.57			.04	.43	.02	.09	T.	.02		.03	T.	T.	.46	T.	.12	T.		.88	.35			.31	.87								4.19
Glenville	Little Kanawha					.17			.10			.20			.60					1.42	.62			.50	.80								4.41
Grafton	Monongahela			.31	.49	.03	T.					.20	.20	.30	.40		.10	.22	.06	1.34				*	*	.97							4.62
Lost Creek	do		T.		.08	T.	T.	T.	T.	T.		T.		.04	.58		.11		.08	1.21	T.			.52	T.								2.62
Mannington	do	T.		T.	.05	.26	.02	.06	.01	T.	T.		.07	.08	.36	T.	.10		.01	1.20	T.			.70	T.								2.92
Morgantown	do					.40					.05	.05		T.	.35		T.		.03	.40			T.	.40									1.68
Moundsville	Ohio	.05	.10		.19		T.	.02	T.	T.		.04		.05	.23		.05	T.		.60				.28	.02								1.63
New Cumberland	do		T.			T.	T.	T.		T.	T.			T.	.20		T.	.05	T.	1.80				.40	.10								2.55
New Martinsville	do				.40										.50				.20	1.35				*	.75								3.20
Osceola	do			.10	.14	.10	.10				.20			.20	1.30	.30	.40	.10		.95	.30			.10	.15								4.44
Parkersburg	do	.08	.20	.14	T.	.03	T.			.10	T.	T.		.50	.02	.10	.12		.47	.81			.02	1.15					T.				3.74
Parsons	Monongahela			.50	T.	.20			.05	.20	T.			.20			.20		.01	1.00				.80									3.16
Philippi	do	.01		.04	.43		.02	T.	.02	.01	.13			.15	.42	.01	.16		.02	1.43	.07			1.22	.05								4.19
Pickens	do			.13	.39	.56	.18	.20		.10	.30			.30	.30	.30	.40		T.	3.40				.20	.20								6.96
Rowlesburg	do	.36		.12	.32	.02	.16	.02	.04		.10	.02			.74	.04	.20	.06		1.10	.34			.20	.80								4.64
Saint Marys	Ohio		.15		.45						.20			.50			.10			1.10	.29			.40	1.20								4.39
Smithfield	Fishing Creek	.25		.03	.06	.25			.20	T.		.20		T.	.50	.10	.50	T.		1.74	.20			.20	.60								4.83
Terra Alta	Monongahela																																
Wellsburg	Ohio			.05		.10	.25	T.	.02		.02			.10	.70		.10		.10	.90			.10	.80									3.24
Weston	Monongahela	.20			.08	.44	T.	.10	.20			.08	.06	.04	.90	.04	.14			1.20	.44		T.	.60	.70								5.22
Wheeling	Ohio	.25		T.	.13	.20	T.		.03	.04	.02		.03		.64	T.	.04	T.	.03	.92	.35			.38	.43								3.54
Southern Section.																																	
Bancroft	Great Kanawha				.27		.06	.10	T.			.02	T.	.15	1.10		.10			1.15	.32			.10	.10	T.								3.47
Beckley	do					.80		T.			.20			.30			.08	.60		1.15	.20			.45									3.78
Bluefield	do					.60					.10	.20		1.00									.20										2.10
Charleston	do			.07		.02	.20	.10	.10			.36	T.	.30	.62	.04	.12			.66	.50			T.	.65								3.74
Ceba	Sand Creek		T.			.40	T.	T.	T.	.10			T.	.10	.40	T.	.30		.04	1.40				1.20									3.94
Deane	Big Sandy					.21		.14						1.65	.39			.64	.05	1.29						.45								4.82
Elkhorn	do					.14	.67		T.		.12			.60			.30			.50		.21		.45	.10		.10						3.19
Green Sulphur Spgs.	Great Kanawha					.14	.40	.26			.10	.07	T.	.70	.26	T.			T.	.17	.15			.44	.08									2.77
Hinton	do			.06		.16	.14	.68	T.			.18		.36	1.22	.06	.18	T.		.06	.14	.22		.64	.02									4.12
Holcomb	do				T.	*	.65				*	*	*	*	*	*	1.30			.44				*	.27									2.66
Huntington	Ohio	.04			.28	.08	.08	T				.14		.30	1.18	T.	.12			1.14	.32			.18	.48									1.34
Lewisburg	Great Kanawha				.23	.55	.35	.05			.10		T.	1.00	.20		.20		T.	.93	.50			.60	T.									4.71
Madison	do							.80			.10			.30						1.60	.30			.32										3.42
Marlinton	do				.31	.34					.05	.06		.60	.40		.27		.05	.73	.10			.28										3.19
Nuttallburg	do				.13	.43					.10			.30	.40		1.20		T.	T.					.10									2.66
Point Pleasant	Ohio	.10			.14	.30			.10			.06	T.	.16	.90	T.	.12			1.32	.32			.34	.70									4.56
Powellton	Great Kanawha			.02			.05	T.				*	*	*	*	*	1.70							**	*	.50								2.27
Princeton	do			.10		1.00	.10		.50				.60	1.00		.50				.30	.20			.20	.10									4.60
Robertsburg	do				.35		.13	T.				.15	T.	.20	.95	T.	.10			1.32	.25			.20	.40									1.05
Ryan	do				.27	.06	.04			.08	.05	.02	.65	.17			.09		.11	1.21			T	.88	.02									3.65
Spencer	Little Kanawha	.12				.27			T					T.	.40		.10		.95	1.14	T.			.30	.50				.96					4.74
Sutton	Great Kanawha		T.	T.	T.			T.			.10			.10	.30		.50			1.00	.35			.05	.35									2.75
Union	do																																
Williamson	Big Sandy	.02			.08	.22	.44				.20			.20	.92	T.	.10			.14	.16			T.	.20	T.								2.98

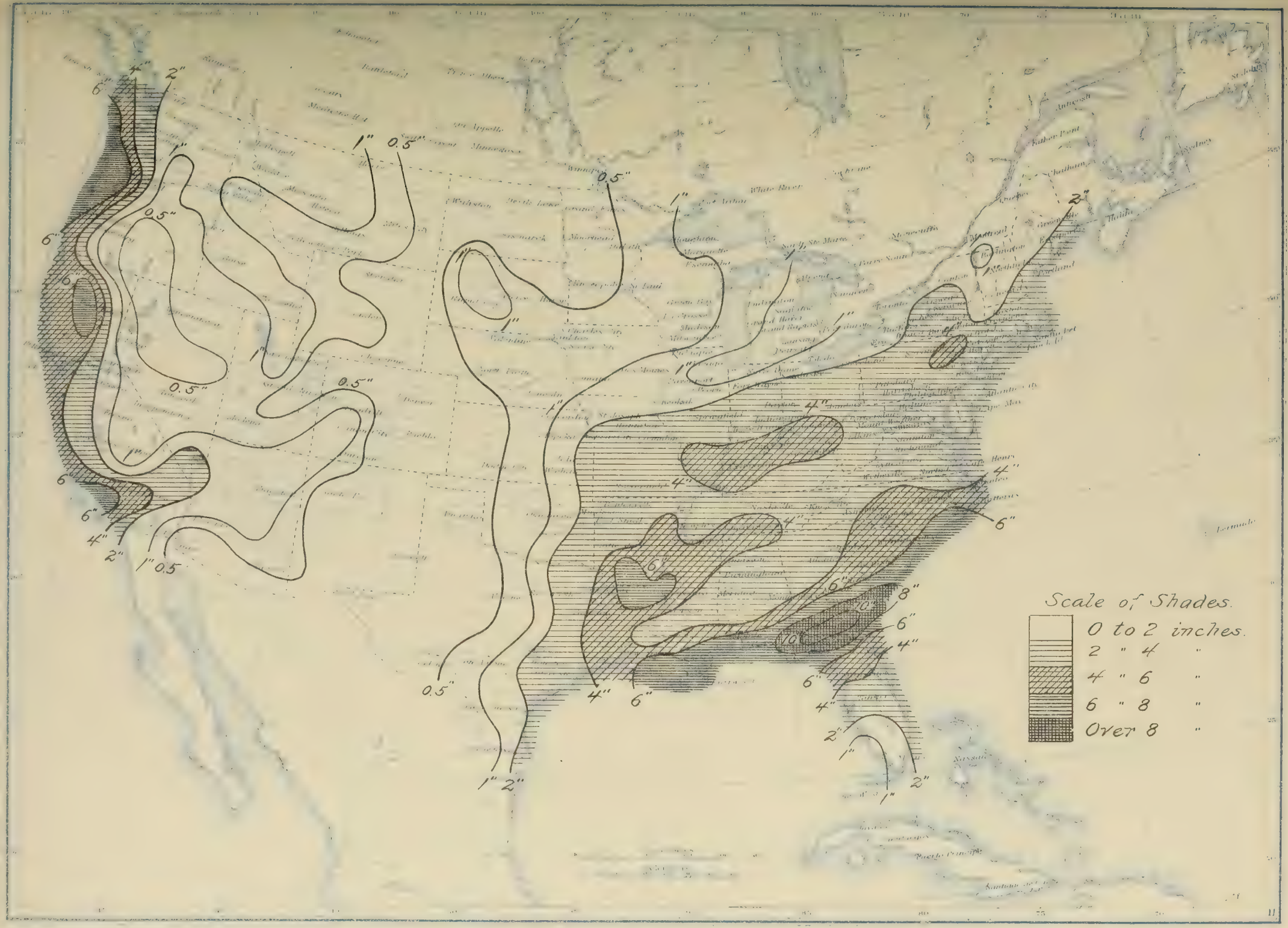
Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement. T. Trace, or less than 0.01 inch.

Daily Temperatures for February, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	37	45	52	51	41	32	45	20	25	39	32	18	17	19	16	22	41	50	49	37	31	46	45	18	39	40	43	43	..	..	..	35.5
	Minimum	27	17	23	30	28	26	20	9	5	23	17	0	3	5	7	0	4	37	34	17	11	11	7	-5	-21	-6	7	11	..	..	..	12.4
Burlington	Maximum	53	51	49	50	39	35	45	26	35	45	34	26	17	30	27	24	34	46	36	36	33	52	37	19	31	41	48	45	..	..	..	37.3
	Minimum	28	24	23	30	31	29	24	17	14	19	22	8	8	8	8	7	-2	24	32	21	9	12	10	2	16	-6	12	17	..	..	..	14.8
Lost City	Maximum	60	50	52	48	46	36	44	30	30	40	36	24	16	24	23	24	26	34	52	48	34	30	50	42	14	30	38	43	..	..	..	36.6
	Minimum	34	26	30	38	32	30	30	17	16	20	18	8	8	8	14	18	20	0	28	32	23	16	20	12	6	-8	14	13	..	..	..	18.2
Martinsburg§	Maximum	50	46	50	50	36	32	44	29	33	41	30	18	18	30	31	22	30	37	35	27	30	42	16	19	27	37	48	42	..	..	..	33.9
	Minimum	35	29	27	31	32	31	29	20	17	17	25	7	7	9	13	9	11	11	17	23	12	13	14	3	1	0	1	16	..	..	..	16.4
Moorefield	Maximum	44	46	36	48	34	36	34	26	28	34	34	26	16	18	28	24	32	50	36	30	28	48	28	16	33	50	34	30	..	..	..	33.1
	Minimum	32	27	28	30	28	30	26	18	24	28	26	8	10	10	18	15	6	30	28	22	20	22	16	8	10	10	20	22	..	..	..	19.7
Upper Tract	Maximum	45	51	50	56	50	34	35	38	41	45	39	26	20	25	26	25	50	56	55	35	50	55	51	22	35	46	50	48	..	..	..	41.4
	Minimum	37	20	33	36	30	28	26	20	15	28	25	8	8	9	10	12	2	44	33	22	16	20	10	5	-11	10	15	20	..	..	..	18.8
Northern Section.																																	
Ben's Run	Maximum	44	54	49	47	39	55	50	27	35	38	30	22	32	26	22	25	41	49	36	33	33	45	27	25	34	40	42	46	..	..	..	37.4
	Minimum	33	23	35	34	28	29	22	17	9	23	19	9	12	15	12	11	8	22	27	19	11	19	14	2	-4	5	13	20	..	..	..	17.4
Buckhannon	Maximum	44	54	55	58	36	54	55	24	32	40	32	22	38	35	22	21	45	52	43	32	35	52	28	18	35	35	47	45	..	..	..	38.9
	Minimum	31	20	28	30	29	30	19	12	10	23	21	5	11	15	11	9	3	27	30	20	14	20	14	4	-13	4	11	20	..	..	..	16.4
Cairo	Maximum	54	54	58	57	55	46	57	37	27	37	37	35	26	33	26	26	34	50	50	40	27	52	53	30	24	38	45	48	..	..	..	41.3
	Minimum	33	19	28	36	25	35	25	14	8	18	26	11	13	18	1	4	-4	17	32	20	10	16	15	4	-17	5	5	15	..	..	..	15.1
Central Station	Maximum	51	64	51	50	43	64	52	25	43	40	33	21	32	31	34	26	51	51	40	34	45	49	31	27	35	51	49	56	..	..	..	42.1
	Minimum	32	19	34	37	28	29	21	13	8	20	20	9	12	12	10	10	0	20	28	20	9	17	14	0	-18	-6	6	16	..	..	..	15.0
Creston	Maximum	57	62	62	58	44	55	51	39	46	41	34	28	33	34	31	29	46	51	40	35	44	53	42	32	31	45	49	50	..	..	..	43.6
	Minimum	34	20	32	32	33	32	25	17	10	19	23	11	13	19	11	11	-1	20	29	23	13	19	16	5	11	1	8	18	..	..	..	17.2
Elkins	Maximum	42	53	58	45	40	47	53	22	36	41	30	22	28	27	18	26	46	55	44	35	35	52	26	21	41	41	45	48	..	..	..	38.4
	Minimum	29	20	36	37	32	35	16	10	10	30	15	6	16	11	10	7	6	37	27	21	16	19	16	-1	10	11	14	20	..	..	..	17.7
Fairmont§	Maximum	46	59	52	51	37	56	39	25	35	43	27	23	29	27	25	17	42	54	40	31	37	51	18	25	40	46	46	49	..	..	..	38.2
	Minimum	32	21	22	37	39	28	37	15	9	10	20	7	8	17	12	12	8	13	26	19	11	11	12	0	-11	-9	4	10	..	..	..	14.6
Glenville	Maximum	51	60	62	52	45	60	52	32	42	41	33	25	35	24	24	29	50	53	47	37	40	55	41	32	40	50	41	50	..	..	..	43.0
	Minimum	24	20	30	40	32	31	21	11	10	20	22	11	20	17	13	11	0	35	32	24	15	20	20	7	-12	2	10	19	..	..	..	18.0
Grafton	Maximum	47	60	62	51	46	54	56	25	35	43	34	24	32	32	25	27	46	56	46	34	35	50	51	19	42	45	48	49	..	..	..	41.9
	Minimum	34	21	28	39	31	31	25	16	7	20	21	9	13	19	13	13	2	23	34	20	14	26	15	2	14	2	8	19	..	..	..	17.5
Lost Creek	Maximum	34	42	58	48	42	55	51	22	32	40	30	21	30	30	19	23	42	52	36	28	34	48	40	15	35	42	42	48	..	..	..	37.1
	Minimum	14	21	33	37	28	27	19	12	5	21	19	6	9	14	10	7	3	20	27	17	6	14	10	0	22	8	0	12	..	..	..	12.9
Mannington	Maximum	46	55	52	48	43	52	52	24	32	39	33	23	27	27	21	25	42	53	40	29	35	49	40	19	36	44	45	47	..	..	..	38.5
	Minimum	32	20	30	34	28	26	24	15	10	21	23	7	10	18	11	11	0	18	28	19	9	17	12	3	20	9	4	15	..	..	..	14.6
Morgantown	Maximum	45	56	52	47	38	43	51	23	31	38	30	20	22	22	19	24	40	58	44	44	33	47	28	15	40	43	..	46	..	..	..	37.0
	Minimum	31	24	42	35	26	27	22	14	8	29	15	4	9	11	8	10	8	32	27	12	10	25	11	-2	-10	8	..	21	..	..	..	16.9
New Cumberland	Maximum	42	44	50	45	40	40	47	21	27	30	22	15	19	23	20	20	36	40	37	25	32	35	13	15	39	43	44	46	..	..	..	32.5
	Minimum	28	24	33	28	20	27	20	10	2	13	10	3	2	13	2	11	6	18	25	7	1	13	8	-8	-14	5	12	15	..	..	..	11.6
New Martinsville	Maximum	48	56	49	49	44	57	52	29	36	39	34	25	31	31	26	21	44	52	42	31	38	50	27	33	37	44	47	50	..	..	..	39.7
	Minimum	34	24	31	25	28	28	23	11	10	24	19	9	12	17	13	12	8	31	30	17	10	20	14	0	-8	2	13	20	..	..	..	17.0
Parkersburg	Maximum	45	55	50	46	35	54	54	28	37	38	28	21	28	26	23	26	46	51	39	29	34	50	18	19	31	40	44	48	..	..	..	37.2
	Minimum	29	25	44	33	28	34	18	15	13	26	16	10	13	16	14	12	10	27	25	20	13	18	14	3	7	3	14	22	..	..	..	18.1
Parsons	Maximum	44	57	45	47	39	49	19	22	31	40	32	23	25	25	19	24	45	52	38	32	35	50	41	42	42	42	45	46	..	..	..	38.6
	Minimum	31	19	28	34	32	33	19	11	9	17	19	2	12	13	3	7	1	22	22	25	17	15	13	2	15	2	7	17	..	..	..	14.8
Philippi	Maximum	45	53	55	50	13	54	56	26	34	42	34	23	33	33	25	26	44	53	52	32	36	51	46	21	37	42	46	47	..	..	..	40.7
	Minimum	33	21	31	39	29	29	22	13	3	21	20	6	12	18	11	10	7	25	32	20	11	18	15	0	22	7	2	15	..	..	..	15.5
Pickens	Maximum	41	53	55	49	38	53	51	26	32	36	28	20	31	30	17	21	46	47	47	34	34	50	33	23	39	44	48	42	..	..	..	38.3
	Minimum	21	20	35	36	32	32	16	7	8	24	20	4	15	10	7	4	0	34	24	24	16	23	18	4	-1	18	18	23	..	..	..	17.6
Wellsburg	Maximum	39	46	50	43	36	42	50	19	27	29	21	13	20	18	17	20	34	43	38	25	30	37	13	13	32	36	41	43	..	..	..	31.2
	Minimum	29	21	35	31	20	27	19	11	2	21	11	2	3	8	5	10	8	22	24	10	5	13	8	-6	6	4	19	22	..	..	..	13.5
Weston	Maximum	56	58	58	50	44	56	34	26	34	42	34	32	34	22	28	18	46	50	36	32	28	48	28	20	36	44	46	40	..	..	..	38.6
	Minimum	32	34	36	40	30	30	32	16	8	16	30	10	12	18	13	10	-8	16	32	22	14	12	16	-4	-12	12	-3	14	..	..	..	16.2
Wheeling§	Maximum	46	53	52	47	40	53	32	26	32	32	27	22	24	29	26	24	43	49	34	32	37	43	15	24	36	44	47	51	..	..	..	36.3
	Minimum	32	24	24	34	26	25	30	14	4	5	15	7	8	12	2	3	10	13	20	15	5	7	12	0	-8	-8	2	21	..	..	..	12.6
Southern Section.																																	
Beckley	Maximum	65	60	68	55	58	51	55	40	38	43	34	28	27	28	28	28	40	51	41	34	46	49	35	30	31	40	46	40	..	..	..	42.5
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	12	12	30	31	25	11	20	28	20	4	18	19	24	..	..	..	19.2
Bluefield	Maximum	..	52	61	57	52	19	54	29	38	43	33	34	32	29	..	29	45	52	57	45	37	53	53	..	31	44	46	43	..	..	..	43.9
	Minimum	..	25	35	44	43	31	24	10	..	27	25	20	11	10	..	10	8	41	44	28	19	27	11	..	9	14	22	38	..	..	..	23.6
Charleston	Maximum	41	62	64	60	48	62	62	30	45	45	..	33	36	38	25	32	53	58	52	34	39	40	39	24	38	44	49	52	..	..	..	44.6
	Minimum	36	28	38	43	37	43	28	19	18	28	..	17	25	20	17	13	12	31	34	28	20	29	23	12	11	27	26	32	..	..	..	25.7
Elkhorn	Maximum	44	54	60	60	53	51	52	30	40	41	35	35	32	30	26	22	47	50	56	45	38	58	46	40	34	41	45	45	..	..	..	43.2
	Minimum	32	27	32	44	42	36	25	14	18	25	28	23	18	18	14	13	6	38	40	31	18	24	36	15	14	20	24	30	..	..	..	25.2
Green Sulphur Spgs.	Maximum	45	54	61	55	52	48	45	31	40	39	34	30	28	28	28	27	51	55	44	36	38	50	40	26	36	45	50	46	..	..	..	41.5
	Minimum	31	19	26	35	40	36	24	14	18	18	27	13	15	17	14	12	9	23	33	29	13	14	25	14	3	17	16	23	..	..	..	20.0
Hinton §	Maximum	48	54	62	56	57	46	43	33	43	40	34	31	27	30	29	23	50	51	46	35	40	57	36	28	35	47	50	46	..	..	..	42.0
	Minimum	33	23	24	30	42	38	35	16	16	19	25	18	19	17	15	19	0	4	29	32	18	16	19	16	8	9	20	20	..	..	..	20.6
Holcomb	Maximum	44	55	62	51	44	53	40	42	38	42	27	27	28	26	23	15	51	55	49	36	56	40	35	26	42	45	50	46	..	..	..	41.0
	Minimum	30	20	23	30	38	35	34	11	13	17	23	10	12	15	8	10	7	6	26	28	19	21	19	11	5	10	18	20	..	..	..	18.0
Huntington§	Maximum	45	56	57	44	39	58	30	29	40	38	35	23	33	23	30	22	52	52	41	31	41	56	19	20	34	42	46	48	..	..	..	38.7
	Minimum	35	25	25	40	32	32	30	17	16	17	29	17	16	18	16	12	10	10	40	24	18	18	18	8	7	9	19	25	..	..	..	20.8
Lewisburg	Maximum	44	51	58	53	55	46	43	27	38	40	34	26	26	26	25	25	47	49	48	38	38	51	44	29	33	45	47	45	..	..	..	40.4
	Minimum	31	18	23	36	39	32	24	11	15	20	24	11	12	15	11	9	1	34	34	28	14	6	20	14	3	16	13	19	..	..	..	18.8
Madison	Maximum	49	60	65	50	46	58	42	36	42	36	34	32	36	..	31	..	..	55	51	29	41	61	29	25	38	44	52	..	..	..	..	43.4
	Minimum	35	22	23	40	35	35	35	18	16	16	27	18	17	19	..	14	..	..	33	28	21	20	25	13	5	6	22	23	..	..	..	22.6
Marlinton	Maximum	40	46	54	49	47	40	..	..	40	39	30	24	24	27	20	21	42	50	42	38	37	48	42	30	34	44	44	42	..	..	..	38.2
	Minimum	30	15	18	27	36	30	..	..	11	14	20	12	12	16	11	4	6	24	34	28	14	8	20	14	2	15	14	20	..	..	..	16.9
Point Pleasant	Maximum	48	58	54	50	44	58	54	29	40	38	35	29	33	32	27	28	50	49	42	32	37	53	41	24	33	43	46	50	..	..	..	41.3
	Minimum	32	21	33	34	28	30	22	14	10	21	21	12	12	15	7	9	8	23	29	19	12	22	14	2	-17	-5	7	16	..	..	..	16.1
Powellton	Maximum	56	66	64	62	56	48	54	32	42	41	36	29	28	31	21	32	58	58	..	34	38	60	45	24	38	44	50	49	..	..	..	44.3
	Minimum	28	34	38	42	35	40	24	16	18	25	21	17	21	20	12	17	2	32	..	29	29	25	24	14	7	23	22	28	..	..	..	23.8
Robertsburg	Maximum	46	59	47	45	43	58	30	29	42	38	32	22	33	22	30	22	52	49	40	31	40	40	22	20	32	46	47	49	..	..	..	38.1
	Minimum	33	20	21	38	30	30	30	18	12	18	24	13	13	16	3	5	0	18	29	23	15	16	16	5	4	1	7	17	..	..	..	16.6
Ryan	Maximum	47	58	62	48	42	55	48	27	38	38	32	21	32	32	26	21	49	50	40	32	46	54	39	24	36	44	46	49	..	..	..	40.6
	Minimum	33	17	28	29	31	33	24	8	8	17	20	11	13	16	3	10	8	20	30	23	13	17	16	5	6	6	13	19	..	..	..	16.0
Spencer§	Maximum	53	65	60	48	45	34	35	30	26	28	25	20	32	17	29	24	53	52	41	33	35	54	20	26	35	47	52	51	..	..	..	38.2
	Minimum	33	19	40	40	32	32	32	16	11	12	25	12	12	12	9	11	4	16	35	24	22	16	17	7	3	0	10	19	..	..	..	18.0
Union §.	Maximum	58	50	58	53	53	47	48	38	26	40	31	30	26	30	26	25	48	51	54	32	50	18	38	28	35	41	15	40	..	..	..	41.0
	Minimum	30	19	25	38	40	33	33	13	12	19	19	15	12	12	14	11	1	24	35	31	12	13	18	15	5	5	17	22	..	..	..	19.4
Williamson§	Maximum	47	58	60	49	45	57	38	30	41	35	34	30	30	23	30	20	52	43	47	29	39	59	28	28	31	38	49	42	..	..	..	40.1
	Minimum	32	25	25	31	38	37	37	11	11	17	25	19	19	19	11	10	7	12	28	28	21	21	21	11	10	10	22	25	..	..	..	20.8

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, February, 1914.



U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MARCH, 1914

BY

HENRY C. HOWE

SECTION DIRECTOR

CLEVELAND, OHIO
WEATHER BUREAU OFFICE
MAY 9, 1914

Departure of the Mean Temperature from the Normal, March, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXII. PARKERSBURG, W. VA., MARCH, 1914. No. 3.

GENERAL SUMMARY.

March was unseasonably cold and generally much deficient in precipitation. The snowfall, however, was the greatest of record for March. The lowest March temperature of record for the State, 13° below zero, was recorded on the 12th. The March record for several of the central mountain stations was also broken on the 21st, when readings from near zero to 7° below were observed. The average temperature was the lowest of record for March since 1896, except in 1906, when the March average was the same. The March precipitation was lower in only one year since 1895. As the snowfall melted during short periods of warm weather and light to moderate rains, there were no floods in the district.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.12 inches. The highest observed at Parkersburg was 30.56 inches on the 21st; lowest, 29.60 inches on the 1st. The highest and lowest at Elkins were 30.52 and 29.50 inches, also on the 21st and 1st, respectively. Low pressure areas crossed the State on the 6-7th, 11th, 17th, and 27th. The pressures were high on the 1st-2d, 12-13th, and 20th-21st.

TEMPERATURE.

The monthly mean for the State, 51 stations reporting, was 37.3°. The mean departure from the normal for 42 stations having ten or more years of record was minus 6.5°. The temperatures were continuously below normal until the 14th, and the readings on the 1st, 2d and 12th were unusually low for March. Warm weather for the season prevailed on the 15-17th. Low temperatures were again recorded from the 18-24th. The March records were broken at a few stations on the 21st, with readings near zero to 7° below. Unseasonably warm weather was the rule after the 25th.

HUMIDITY.

At Parkersburg the humidity at 8 a. m. and 8 p. m. averaged 77 and 66 per cent of the possible amount. At Elkins the averages for the same hours were 83 and 74 per cent. The 26-year March averages for Parkersburg at 8 a. m. and 8 p. m. are 80 70 per cent, respectively. The averages for Elkins for 14 years are 85 and 71 per cent.

PRECIPITATION.

The average precipitation for the State, 59 stations reporting, was 3.03 inches. The mean departure from the normal for 47 stations having ten or more years of record was 1.22 inches. The precipitation was heaviest over the southern and mountain counties. Rain or snow was general in nearly all sections on the 1st-2d, 5-9th, 11th, 18-20th, and 28-29th. Snow fell in most sections on the 1st-2d, 5-9th, and 18-20th. The snowfall was heaviest in the central mountain sections, where the falls at most stations ranged from 12 to 20 inches on the 1st-2d, 12 to 35 inches on the 5-9th, and 6 to 15 inches on the 18-20th. The snowfall was lightest over the western counties, especially the northern panhandle section. Owing to melting snow and moderately heavy rains over Ohio and Pennsylvania, the Ohio river was nearly bank full in the district at the close of the month. The crest stages at Wheeling, Parkersburg, Point Pleasant, and Huntington were 32.1, 33.2, 38.4 and 41.7 feet, respectively.

WIND.

The average wind velocity at Parkersburg was 7.2 miles per hour, or normal as compared with the March record for 24 years. At Elkins the average was 4.7 miles, or .9 of a mile below the March average for 15 years. The highest velocity at Parkersburg was 40 miles from the northwest on the 1st. The highest at Elkins was 24 miles from the west on the 18th. High winds occurred in all sections on the 1st and 2d.

SUNSHINE AND CLOUDINESS.

The sunshine at Parkersburg averaged 42 per cent of the possible amount, or 4 per cent above the March average for 17 years. The average at Elkins was 37 per cent, or normal.

MISCELLANEOUS PHENOMENA.

Halos, lunar: Parkersburg, 6th; Pickens, 5th.
Halos, Solar: Elkins, 25th and 31st; Wellsburg, 21st and 31st.
Haze, light: Bayard, 10th, 12th, 16th, 17th and 22d.
Sleet: Wheeling, 7th.
Thunderstorms: Holcomb, Philippi and Wellsburg, 30th.

COMPARATIVE DATA FOR MARCH.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in inches.
1891	34.9	..	....	4.91	....
1892	36.4	87	8	3.50	....
1893	40.7	84	3	1.49	....
1894	45.8	88	1	1.94	....
1895	39.6	90	0	3.05	....
1896	36.1	76	−10	4.45	....
1897	46.1	81	12	3.60	....
1898	48.5	86	9	5.43	....
1899	42.5	76	0	5.82	4.5
1900	38.5	78	− 5	3.79	14.7
1901	42.9	83	−11	3.23	2.3
1902	43.4	80	− 5	4.30	15.0
1903	51.3	87	13	4.47	0.2
1904	43.8	86	7	4.12	1.9
1905	46.6	88	− 2	4.10	0.7
1906	37.3	75	− 7	4.77	13.4
1907	49.6	94	2	4.77	1.2
1908	47.8	89	15	6.04	1.1
1909	40.8	83	10	3.38	4.7
1910	49.5	90	5	0.55	1.1
1911	40.5	90	− 5	3.30	5.2
1912	39.9	80	6	5.02	5.1
1913	45.7	89	− 3	4.53	2.7
1914	37.3	83	−13	3.03	17.7
Entire period	42.8	94	−13	3.90	5.9

Climatological Data for March, 1914.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.					Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	
Panhandle Section.																				
Bayard	Grant	2,500	12	31.0	−8.3	69	27	−13	12	46	3.70	−0.96	0.66	32.5	13	7	5	19	w.	Solomon Clark
Burlington	Mineral	875	20	35.3	−6.5	64	16	− 2	12	37	2.00	−1.15	0.60	19.0	7	7	20	4	w.	J. W. Vandiver
Franklin	Pendleton	641	8	36.2	.....	70	16	4	21	53	1.50	.....	0.70	15.0	3	18	6	7	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	1.89	−1.33	0.40	8.5	8	.....	.....	.....	w.	S. W. Lightner
Lost City	Hardy	.....	8	35.6	.....	66	27	2	21	30	1.40	.....	0.50	12.0	6	3	16	12	n.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	37.4	−3.9	77	27	13	2	39	2.18	−1.10	.....	8.0	8	13	12	6	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	37.8	−5.9	75	27	7	22	39	1.90	−0.71	0.90	19.0	4	7	20	4	nw.	John C. Fisher
Romney [a]	Hamshire	824	19	39.2	−3.6	74	27	5	13	39	.....	.....	.....	.....	.....	7[d]	14[d]	6[d]	.....	John C. Linthicum
Upper Tract [c]	Pendleton	1,230	15	37.7	−6.5	72	27	− 2	21	40	.....	.....	.....	.....	.....	1[d]	18[d]	8[d]	w.	J. M. Mallow
Averages and	Extremes	.....	....	36.3	−5.8	77	27	−13	12	53	2.08	−1.05	0.90	16.3	7	9	13	9	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	37.4	−6.8	73	26	9	2†	37	2.61	−1.86	0.50	16.0	13	18	2	11	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	3.26	.....	0.60	.....	9	.....	.....	.....	.....	W. T. Miller
Buckhannon [a]	Upshur	1,411	24	36.2	−5.9	74	31	Zero	12	42	3.04	−1.45	0.45	23.5	13	14	1	15	.....	H. A. Darnall
Cairo	Ritchie	674	12	38.8	−7.9	78	26†	2	12	42	3.23	−0.92	0.55	.....	12	2	14	15	w.	Van A. Zevely
Central Station	Doddridge	950	12	37.3	−5.4	77	26	− 2	12	47	1.84	−1.17	0.32	13.5	14	4	14	13	w.	G. W. Sherwood
Cheat Bridge	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	2.80	.....	0.70	.....	12	.....	.....	.....	.....	Franz A. Degler
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	5.69	.....	1.20	34.0	12	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	38.4	−6.2	77	26	2	12	44	2.20	−1.74	0.45	8.3	13	6	9	16	sw.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	5.98	.....	1.10	54.5	22	.....	.....	.....	.....	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	2.10	.....	0.58	.....	9	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	34.0	−5.1	70	26	− 3	21	42	2.34	−1.73	0.46	20.0	16	6	8	17	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	36.3	.....	75	26	3	12	48	2.47	−1.68	0.51	12.0	16	15	3	13	w.	F. P. Hall
Glenville	Gilmer	738	25	38.7	−5.8	80	26	Zero	12	49	1.97	−2.29	0.45	14.0	8	12	1	18	w.	Joe N. Craddock
Grafton	Taylor	1,000	22	38.0	−5.3	74	26	4	21	42	2.20	−2.05	0.45	13.0	13	16	2	13	s.	Joseph Gerken
Lost Creek	Harrison	1,026	18	34.4	−9.4	74	26	− 5	12	46	1.42	−3.02	0.24	12.5	11	13	4	14	w.	Allen Smith
Mannington	Marion	974	12	36.4	−8.3	73	26	− 2	12	45	2.41	−1.68	0.52	10.8	17	9	6	16	w.	Jas. A. Morgan
Morgantown [a]	Monongalia	1,250	40	36.8	−6.1	73	26	6	2†	37	1.26	−2.69	0.31	8.5	9	0	23	7	.....	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	38.9	−6.0	76	26	8	2	43	0.89	−3.07	0.16	3.1	10	14	5	12	sw.	M. L. Brown
New Cumberland	Hancock	987	15	36.2	−4.6	70	26	8	2†	37	2.15	−1.46	0.60	4.0	7	7	5	19	s.	Frank S. Evans
New Martinsville	Wetzel	634	21	39.2	−4.9	76	26	9	2	43	2.63	−1.20	0.45	8.3	10	7	11	13	s.	Wm. Ankrom
Osceola	Randolph	3,600	0	.....	.....	.....	.....	.....	.....	.....	6.90	.....	1.20	63.0	18	.....	.....	.....	w.	A. T. Dohmer
Parkersburg	Wood	638	26	38.9	−3.4	75	26	9	2	35	2.19	−1.63	0.64	6.0	18	8	10	13	sw.	U. S. Weather Bureau
Parsons *	Tucker	1,656	15	32.0	−9.0	72	26†	− 8	21	50	5.45	+1.15	2.00	34.5	10	8	6	17	.....	J. W. Swisher
Philippi	Barbour	1,149	22	36.9	−6.7	75	26	2	21	42	2.20	−2.20	0.41	13.5	16	10	9	12	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	33.2	−7.1	71	26	− 4	21	40	7.11	+1.72	1.20	54.0	14	13	6	12	w.	Dr. J. L. Cunningham
Rowlesburg *	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	3.39	−0.92	0.54	19.3	20	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	3.01	.....	0.80	15.0	11	.....	.....	.....	.....	J. O. Goodman
Smithfield	Wetzel	835	10	35.0	.....	74	25†	− 1	12	49	2.84	−1.51	0.37	18.5	17	8	16	7	nw.	G. M. Whisler
Terra Alta	Preston	2,612	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Wm. R. Shaw
Wellsburg	Brooke	1,225	20	34.8	−3.2	68	26	6	2	32	2.03	−1.47	0.60	8.4	13	6	10	15	w.	C. P. Waugh
Weston	Lewis	1,026	26	36.8	−7.8	70	26†	− 4	21	38	3.56	−0.97	0.90	19.0	14	8[a]	13[a]	9[a]	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	38.2	.....	75	26	12	2†	43	2.22	−1.12	0.82	2.2	14	10	9	12	s.	Miss M. B. Forsyth
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Averages and	Extremes	.....	....	36.9	−6.1	80	26	− 5	12	49	2.92	−1.60	1.20	18.2	13	10	8	13	w.	
Southern Section.																				
Bancroft	Putnam	574	11	40.6	−5.3	79	25	7	21	51	2.47	−1.62	0.44	12.5	13	4	0	27	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John A. Ewart
Bluefield [d]	Mercer	2,558	20	38.4	−6.0	69	16	4	21	37	3.90	0.10	1.04	15.0	8	16[b]	6[b]	7[b]	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	43.7	−6.6	77	26	11	21	35	3.35	−1.50	0.96	21.4	17	9	9	13	w.	R. C. Hewes
Cuba	Jackson	650	14	38.3	−7.1	75	26	Zero	12	42	2.92	−0.78	0.64	11.5	12	7	15	9	nw.	C. T. Perry
Doane	Wayne	717	7	.....	.....	.....	.....	.....	.....	.....	4.15	.....	1.09	.....	13	7	9	15	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	38.4	−8.4	70	16†	7	2†	34	4.77	+0.33	1.03	18.4	13	8	15	8	w.	J. J. Lincoln
Green Sulphur Spgs	Summers	1,600	19	37.6	−6.4	74	16†	− 1	21	46	2.94	−0.68	0.77	11.2	14	8	13	10	w.	Arthur George
Hinton	do	1,450	25	38.6	−6.8	75	16	8	21	46	3.66	−0.45	0.74	11.0	15	7	2	22	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	33.9	.....	71	26	− 2	21	45	4.48	.....	.....	56.5	14	13	2	16	.....	R. E. Ferguson
Huntington	Cabell	538	19	39.2	−6.2	77	26	11	2†	40	2.66	−1.76	0.68	11.3	14	13	1	17	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	35.8	−7.9	71	26	− 7	21	42	3.55	−0.50	0.86	18.5	10	17	2	12	nw.	Geo. T. Argabrite
Madison	Boone	704	9	40.0[i]	.....	78[i]	26†	Zero[h]	21†	50	2.83	.....	.....	13.0	14	9[h]	5[h]	9[h]	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	35.0	−5.0	65	16†	− 1	21	40	2.54	−1.55	0.70	15.5	10	14	9	8	.....	C. J. McCarty
Nuttallburg	Fayette	2,252	22	.....	.....	.....	.....	.....	.....	.....	4.16	−0.31	1.50	41.0	7	.....	.....	.....	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	40.0	−6.0	78	26	6	12	43	3.52	−0.63	0.94	9.0	13	10	1	20	sw.	W. D. Holmes
Powellton [a]	Fayette	933	17	41.5	−4.9	78	26	3	21	41	5.39	+0.76	1.25	.....	14	8	12	10	.....	Morris Hansford
Princeton	Mercer	2,395	14	34.9	−8.0	66	26	− 4	21	40	5.85	−0.51	1.50	24.0	13	11	12	8	w.	H. Scott
Robertsburg	Putnam	574	14	37.2	−9.4	78	26	2	12	48	2.50	−1.72	0.55	10.0	10	11	1	19	.....	E. P. Turley
Ryan	Roane	700	11	37.1	−8.7	77	26	Zero	12	47	2.48	−1.91	0.51	15.3	15	6	9	16	.....	Wm. E. Ryan
Spencer	do	784	16	36.8	.....	83	26	− 2	12	55	3.56	−0.11	1.60	16.0	10	3	17	11	.....	A. M. McKown
Sutton	Braxton	839	11	37.8[e]	.....	78[e]	26	− 5[e]	21	47[j]	1.45	−1.77	0.50	14.5	5	11[b]	5[b]	13[b]	.....	Ben Gillespie
Union	Monroe	2,250	10	37.0	−7.1	72	16	− 1	21	45	2.08	−1.97	0.60	6.0	5	.....	.....	.....	.....	Shelton Clark
Williamson	Mingo	660	13	37.8	−11.0	75	26	5	21†	44	4.66	+0.11	1.22	14.8	15	15	5	11	w.	J. F. Keyser
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Averages and	Extremes	.....	....	38.1	−7.1	83	26	− 7	21	55	3.47	−0.83	1.60	17.4	12	10	7	14	w.	
State Averages and	Extremes	.....	....	37.3	−6.5	83	26	−13	12	55	3.03	−1.22	1.60	17.7	12	10	8	13	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for March, 1914.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac	.60	.40	.20		T.	.42	T.	.10	.20		.25		T.					.66	.10	.20			.03				T.	.29		.25		3.70
Burlington	do	.10				.30	.60					.40							.10		.40								.10	T.	T.		2.60
Harpers Ferry	do		.04				.26	.36					.25						.40		.16								.20		.22		1.89
Lost City	do					.10	.20					.50							T.		.40										.14	.06	1.40
Martinsburg	do	T.	T.			*	1.20					.25						*	.28		.15		T.				T.		.15	T.	.15		2.18
Moorefield	do	T.				.20	.90					.50								T.	.30				T.				T.		T.		1.90
Romney	do						.30	.20	.20			.20																					* *
Upper Tract	do	T.				T.	.62	T.	T.	T.		.60							T.		.40												* *
Northern Section.																																	
Bens Run	Ohio	.20	.20			.06	.38	.08	.05			.21							.27	.10	.06						.05	.45	.50		T.		2.61
Brandonville	Monongahela		.10	.56								.54							.60	.09	.48								.49		.32	.08	3.26
Buckhannon	do	.45	.45			T.	.05	T.	.20	.20	.40								.20	T.	.35			.05				.05	.40	.10	.14		3.04
Cairo	Little Kanawha	.20			.22		.30	.12	.05		.44	.20		.20							.25								.55	.43		.27	3.23
Central Station	Middle Is. Creek	.18	.03			.02	.04	.23	.07	.02		.13							.26	T.	.18			T.			T.	.10	.26	.07	.25		1.84
Cheat Bridge	Monongahela	.02	.08	.20		T.	.05	.15	.15	T.	.10	.15	.50						T.	.70					T.				T.		.30	.40	2.80
Cortland	do		.60				.30			.40	.30	.60						1.20	.80		.34								.30	.50	.15	.20	5.69
Creston	Little Kanawha	.05	.10				.28	.05	.03	.10		.15	.15						.31	T.	.30			T.			T.		.45		.20	.03	2.20
Davis	Monongahela	.10	1.10	1.00	.10		.10	.10	.20	.73	.10	.20	.10	T.	.04				.34	.40	.24	.05		.20	.05		T.		.55	.01	.12	.15	5.98
Elizabeth	Little Kanawha	.09	.05				.26	.05	.14			.23									.27								.58		.43		2.10
Elkins***	Monongahela	.29	.20	.01		T.	.12	.05	.17	.03		.30		T.			T.	.21	.25	.09	.19			T.			.01	T.	.29	.01	.12	T.	2.34
Fairmont	do	.04	.22	.12			.12	.39	.07	.03	T.	.15	.15	T.	T.				.31	.03	.23			T.			T.		.34	.03	.19	.05	2.47
Glenville	Little Kanawha		.45						.10	.10		.20	.23						.17	T.	.45								.27				1.97
Grafton	Monongahela	*	.38			.10	.45	.18				.18							.12	*	.35								.04	.10	.12	.18	2.20
Lost Creek	do	.14	.15	T.		T.	.05	T.	.20	.08		.15							.15	T.	.24			T.				.04	.10	T.	.12		1.42
Mannington	do	.20	.09	.01		.01	.40	.01	.11	.04	T.	.18		T.					.38	.01	.16			.01			.01	.08	.44	T.	.27		2.41
Morgantown	do	.05	.10	.05		T.	.31		T.			.20							.08		.07								.20	.20			1.26
Moundsville	Ohio	T.					.10	.01	.07	T.		.05							.14		.02						.04	.15	.16	T.	.15		0.89
New Cumberland	do	T.	T.				.10	.40	T.	T.		T.							T.	T.	T.			.05		.20		.50	.60		.30		2.15
New Martinsville	do	.15	.15			.05	.40	T.	.08	T.		T.							.40	T.							.25	.30	.45		.40		2.63
Osceola	Monongahela		1.20	1.00			.40	.30	.20	.90	.60	.10	.80		.20				.30	.30				.10	.05				.15	.10	.05	.15	6.90
Parkersburg ***	Ohio	.05				.07	.15	.09	.03	.09		.29		T.			T.	.15	.10	.03	.02		.01			.06	.01	.54	.10	.04	.36	T.	2.19
Parsons	Monongahela	1.00	.60				.20	T.		.40		.40							.30	.10	.40			.05						T.	T.	2.00	5.45
Philippi	do	.12	.12			.03	.32	.03	.05	.03		.27	.03						.27	.02	.28			.10				.09	.32	T.	.12		2.20
Pickens	do	1.20	.80				.10	.20	.50	.50		.50							1.00	.20	.40			T.			T.	.44	.28	.53	.46		7.11
Rowlesburg	do	.02	.42	.29	.10		.08	.10	.12	.06	.02	.06	.12						.50	.16	.20	.02		.08					.44	.10	.16	.34	3.39
Saint Marys	Ohio	T.	.40				.26	.05		.20		.40	.05						.20	.20							.05		.80		.40		3.01
Smithfield	Fishing Creek	T.	.30	.20		T.	.18	.11	.23	.10	.05	.30	.10	T.	T.				.06	.20	.20			.10	T.			.14		.20		.21	.16	2.84
Terra Alta	Monongahela																																
Wellsburg	Ohio	.02	.10				.04	.30	.05	.05		.10							.10	.05				.02		T.		.20	.40	T.	.60		2.63
Weston	Monongahela	T.	.40	T.			.90	.12	.14	.16		.20	.20					T.	.24	.12	.40			.08					.40		.10	.10	3.56
Wheeling	Ohio	T.	.01	T.	T.		.22	.12	.08	.02	T.	.04	.01	T.	T.				.20	.02	T.	T.		.02	T.		.01		.82	T.	.55	.10	2.22
Southern Section.																																	
Bancroft	Great Kanawha	.10	.20	T.		T.	.29		.10	.05		.10	.30						.29	T.	.40						.10		.44	.05	.05		2.17
Beckley	do																																
Bluefield	do							.20	.30	.10		.66							.65		.60										1.04	.35	3.90
Charleston	do	.10	.32			.02	.20	.03	.18	.08	T.	.68	.28						.42	.02	.65	T.		.02				T.	.18	.02	.13	.02	3.35
Cuba	Sand Creek	.30				T.	.37	.10	.05	.10		.40							.44		.20			T.		T.		.43	.21	.03	.29	T.	2.92
Doane	Big Sandy	.33	.24			.10				.40		.40	1.09						.40		.35					.08		.10		.35	.26	.05	4.15
Elkhorn	do	.40	.21				.32	.20	.30	T.	.28	.13							.15	.15	.45									.62	1.03	.53	4.77
Green Sulphur Spgs.	Great Kanawha	.07	.07			.05	.27	.08	.05	T.		.77							.67	.01	.57							.01		.03	.21	.08	2.94
Hinton	do	T.	.16			.08	.24	.16	.08	.04	T.	.54	.32						.54	.02	.64	T.							.06	.04	.70	.04	3.66
Holcomb	do	*	1.46			.05	*	*	*	.70		.53							.68	*	.50							*	.18			.38	4.48
Huntington	Ohio	.08	.08			T.	.22	.02	.12	.04		.48	.20						.30	T.	.32			T.			.04	T.	.50	.06	.20		2.66
Lewisburg	Great Kanawha	.30	T.			.15	.20	T.	.40	T.		.86							.55	T.	.60						T.	.09		.05	.35	T.	3.55
Logan	Guyandotte																																
Madison	Great Kanawha	.10	.20					.10				.60							*	*	*	.90	.10				.01	T.	.15	.07	.55	.05	2.83
Marlinton	do		.10			.17	.24		.08			.70							.38	.03	.30								.35		.19		2.54
Nuttallburg	do	.60						1.50		.40		.70							.30	T.	.60							.06					4.16
Point Pleasant	Ohio	.08	.08				.26	.04	.14	.04		.34	.20						.40	T.	.26						.36		.94		.38		3.52
Powellton	Great Kanawha	.40	.20			*	.70		.40	.32		1.25		*				T.	.53	.07	.98							.06		.05	.23	.20	5.39
Princeton	do	.50				.20	.10	.30	.10		.10	.55						1.50		.60								.15	.15	1.50		.10	5.85
Robertsburg	do	T.	.10	T.			.29	T.	.12			.35	.15						.29	T.	.30						.15		.55		.20		2.50
Ryan	do	.23	.01			.07	.17	.04	.11	.06		.51							.02	.06	.51			.01				.49		.12		.07	2.48
Spencer	Little Kanawha	.30	.20			T.	.30	T.	.20	.20	T.	.40			T.						.30								1.60		.04	.02	3.56
Sutton	Great Kanawha	T.	.30				T.	T.	.30			.25							.10		.50		T.				T.		T.		T.		1.45
Union	do											.10	.30						.52		.60										.56		2.08
Williamson	Big Sandy	.02	.40			.16	.36	.06	.16	T.		.94	.28						.32	T.	.90	T.					.04		.28	.24	.30	.20	4.66

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T Trace, or less than 0.01 inch. * * Incomplete.

Daily Temperatures for March, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	42	14	25	32	32	36	36	34	27	36	35	33	31	49	55	59	59	59	25	21	33	33	35	53	61	66	69	56	52	62	60	42.6
	Minimum	14	0	7	20	10	25	25	23	17	19	22	-13	12	3	42	23	25	24	15	13	-7	8	13	10	22	36	35	45	38	38	36	19.4
Burlington	Maximum	41	29	37	41	33	35	46	36	33	42	47	35	38	52	62	64	57	49	36	34	35	42	45	58	54	52	59	60	55	56	54	45.7
	Minimum	12	10	19	25	22	28	27	28	29	27	16	-2	20	15	29	29	36	25	24	19	7	23	22	24	28	32	36	41	40	40	41	24.9
Lost City	Maximum	34	20	38	38	34	36	40	34	28	38	37	32	36	46	56	61	58	46	38	21	30	35	42	50	58	65	66	63	47	64	64	43.7
	Minimum	18	10	18	28	28	30	32	28	28	17	28	7	16	16	34	34	36	38	21	18	2	24	22	26	35	46	42	44	43	42	41	27.5
Martinsburg§	Maximum	40	27	40	43	35	36	44	40	34	44	33	35	40	51	64	60	59	44	34	30	33	42	46	57	56	74	77	69	45	54	57	46.9
	Minimum	25	13	15	23	25	28	27	30	27	27	30	15	18	22	25	34	37	33	27	21	15	17	25	29	27	38	42	53	41	40	39	28.0
Moorefield	Maximum	32	34	36	40	32	30	38	36	32	44	30	34	48	54	55	65	52	46	50	38	33	46	38	40	50	65	75	62	58	56	60	45.5
	Minimum	26	12	22	24	28	26	30	32	18	24	26	12	26	28	30	32	34	28	30	30	30	7	26	30	32	48	60	54	46	42	40	30.1
Romney	Maximum	..	20	34	40	35	34	35	47	45	40	40	30	32	47	64	65	66	52	34	32	32	44	57	68	70	73	74	67	62	45	55	48.0
	Minimum	..	6	18	22	30	28	32	33	25	27	30	18	5	28	42	44	30	30	28	20	10	25	40	29	40	50	49	55	41	38	39	30.4
Upper Tract	Maximum	44	..	..	..	34	34	34	35	30	42	40	39	38	55	65	70	61	50	31	29	38	40	45	61	61	70	72	70	61	68	67	49.4
	Minimum	20	..	..	..	22	27	27	27	24	20	27	2	13	15	37	33	36	27	21	19	-2	21	23	23	25	30	45	45	40	40	40	26.0
Northern Section.																																	
Ben's Run	Maximum	43	23	33	40	39	37	38	33	30	43	35	34	41	57	64	65	55	48	28	32	36	39	43	62	69	73	56	55	67	67	62	46.7
	Minimum	11	9	21	22	25	33	32	26	22	19	26	9	23	28	36	35	31	25	23	15	12	21	29	25	33	47	44	45	47	53	46	28.2
Buckhannon	Maximum	40	15	33	40	41	39	40	37	33	42	40	35	40	..	63	67	57	50	30	30	33	38	45	60	70	70	71	69	68	69	74	48.0
	Minimum	15	4	11	25	21	32	30	26	21	14	24	0	14	..	35	34	32	21	20	15	1	12	23	24	28	40	41	49	36	40	45	24.4
Central Station	Maximum	40	19	37	41	38	37	37	35	31	46	40	42	42	63	65	67	58	50	28	32	35	40	45	69	74	77	66	59	71	69	64	48.9
	Minimum	16	7	18	16	22	32	30	26	20	14	25	-2	15	24	35	35	28	24	20	15	1	13	25	22	33	46	45	46	46	53	46	25.7
Creston	Maximum	47	24	36	43	39	42	42	40	46	51	39	40	46	60	69	70	64	52	32	31	37	45	50	67	52	77	63	59	71	68	65	50.5
	Minimum	17	10	21	19	25	33	32	30	25	15	29	2	14	21	31	32	28	27	19	19	5	14	26	23	26	42	41	49	42	54	48	26.4
Elkins	Maximum	39	15	29	36	41	39	36	31	26	40	32	33	36	57	64	65	57	33	25	24	34	35	41	60	68	70	70	57	69	66	58	44.7
	Minimum	3	2	13	10	18	32	29	22	19	16	19	5	20	15	33	30	33	18	18	7	-3	14	24	22	30	47	41	48	42	50	47	23.4
Fairmont§	Maximum	35	20	35	44	40	36	40	35	30	45	31	39	41	58	67	68	60	36	28	30	38	42	45	66	74	75	70	55	72	69	62	47.9
	Minimum	20	6	10	19	25	26	32	27	21	20	23	3	4	24	28	35	31	31	22	15	9	10	20	22	26	31	46	49	44	45	43	24.7
Glenville	Maximum	41	20	37	39	40	45	41	38	37	50	40	41	48	50	70	71	68	48	30	33	32	40	40	67	78	80	70	70	76	78	76	51.4
	Minimum	16	9	20	18	24	28	31	29	24	16	24	0	16	20	33	37	35	26	20	6	20	18	26	24	29	47	41	39	43	45	41	26.0
Grafton	Maximum	49	19	33	41	42	41	40	35	36	45	45	38	40	58	66	69	69	57	30	28	38	40	45	64	72	74	63	70	70	70	67	50.1
	Minimum	19	8	13	12	24	32	32	28	23	19	26	5	16	20	30	31	30	27	24	16	4	18	24	23	30	33	42	45	55	51	47	26.0
Lost Creek	Maximum	39	13	28	38	39	34	35	31	27	43	38	36	40	55	65	64	58	49	25	24	31	38	43	62	70	74	69	58	67	68	60	45.8
	Minimum	13	3	12	10	19	30	29	25	19	14	23	-5	12	19	37	30	25	22	19	13	-2	10	22	18	24	46	44	50	40	51	42	23.0
Mannington	Maximum	46	17	35	40	38	38	38	36	29	44	41	36	39	56	64	67	59	53	28	27	32	39	41	61	72	73	72	59	70	67	62	47.7
	Minimum	17	7	15	17	21	32	31	27	20	16	24	-2	17	20	32	30	28	26	23	14	2	15	26	21	27	45	41	47	41	51	43	25.0
Morgantown	Maximum	41	15	31	41	32	37	37	34	27	41	42	35	38	54	..	65	55	49	27	27	35	38	40	59	72	73	68	59	70	65	61	45.6
	Minimum	13	6	15	14	25	32	31	27	22	25	23	6	20	30	..	49	35	24	21	17	12	17	25	25	35	47	56	49	45	50	42	27.9
New Cumberland	Maximum	42	19	36	34	40	38	35	31	30	40	35	35	43	54	58	60	50	46	27	25	34	39	39	56	68	70	65	65	68	67	57	45.4
	Minimum	11	8	14	22	18	30	29	25	20	27	20	8	20	28	33	37	30	23	21	12	10	16	22	21	31	50	56	55	42	47	47	26.9
New Martinsville	Maximum	45	21	38	41	40	40	42	37	38	47	40	40	42	60	67	68	60	52	31	31	36	42	43	65	74	76	68	60	71	68	64	49.9
	Minimum	14	9	20	24	25	33	32	28	22	23	26	11	24	27	34	35	30	25	24	17	11	22	30	25	31	46	44	45	47	51	45	28.4
Parkersburg	Maximum	43	24	35	39	39	42	40	35	33	46	37	35	44	60	66	68	56	36	29	26	33	40	42	63	70	75	60	57	70	67	63	47.5
	Minimum	10	9	20	25	28	35	32	25	21	23	22	13	22	31	45	45	35	26	23	18	14	22	30	28	42	52	53	45	48	52	46	30.3
Parsons	Maximum	34	14	18	34	38	34	35	34	36	39	34	37	35	53	60	63	54	39	23	24	37	39	39	56	68	72	71	72	71	66	58	44.7
	Minimum	13	4	5	11	13	32	29	29	21	10	5	2	7	8	26	25	28	20	19	5	-8	12	15	6	25	35	40	36	40	45	40	19.2
Philippi	Maximum	42	18	39	40	41	39	38	36	30	42	40	38	40	52	65	67	62	52	28	28	35	50	41	62	71	75	72	62	72	70	64	48.7
	Minimum	18	6	12	10	20	32	30	26	22	12	25	10	18	12	30	36	30	25	22	16	2	17	21	20	30	46	43	50	40	52	46	25.1
Pickens	Maximum	37	26	30	43	40	36	36	27	25	40	34	34	38	51	64	61	58	37	23	33	36	35	39	63	70	71	66	57	54	60	58	44.6
	Minimum	6	1	10	13	19	29	26	20	16	5	20	-1	7	14	34	38	29	18	14	5	4	8	18	25	41	44	42	44	42	52	44	21.8
Wellsburg	Maximum	39	16	31	34	39	37	34	30	28	38	34	30	38	51	57	59	51	45	26	23	31	37	35	55	66	68	64	54	66	63	57	43.1
	Minimum	9	6	9	23	22	32	30	25	19	21	21	9	23	26	38	41	31	21	21	12	11	21	26	23	37	44	49	43	41	49	38	26.5
Weston§	Maximum	32	24	34	42	38	40	38	36	34	46	31	38	44	54	66	68	58	34	30	20	34	40	50	58	68	70	70	60	66	68	66	47.0
	Minimum	20	16	9	18	24	28	32	28	22	14	28	4	18	20	30	34	38	32	20	18	-4	12	26	30	34	40	40	52	42	54	48	26.7
Wheeling§	Maximum	36	22	39	40	41	38	38	35	38	45	35	40	45	59	66	68	60	38	30	31	38	44	42	66	73	75	60	59	74	68	64	48.6
	Minimum	22	12	12	22	24	24	33	29	21	23	26	13	16	30	35	35	30	34	24	17	14	17	22	25	30	49	45	46	45	47	42	27.9
Southern Section.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Bluefield	Maximum	..	22	39	46	42	40	49	32	28	49	50	34	40	57	..	69	64	46	32	30	35	..	45	62	61	67	65	68	..	67	61	48.1
	Minimum	..	5	17	27	32	31	14	24	19	12	30	21	18	26	..	40	36	25	17	20	4	..	21	31	46	51	52	52	..	50	45	28.7
Charleston	Maximum	50	28	40	45	47	47	47	42	43	50	50	35	39	63	70	70	67	60	32	30	36	50	50	67	72	77	76	66	72	72	70	53.6
	Minimum	25	12	22	30	33	40	36	33	27	25	32	15	22	30	47	48	40	28	23	22	11	22	33	32	38	54	54	55	56	50	54	33.8
Elkhorn	Maximum	40	26	38	42	39	42	38	32	30	48	43	38	42	58	64	70	70	50	40	30	38	37	46	59	60	68	64	65	65	59	58	48.4
	Minimum	10	7	18	25	32	32	25	22	23	16	26	24	20	27	32	38	36	26	20	21	7	24	28	26	35	46	42	50	48	50	42	28.3
Green Sulphur Spgs.	Maximum	39	22	39	45	39	41	39	36	30	49	39	37	42	60	65	74	54	45	37	31	37	41	48	65	68	74	66	69	68	65	62	49.4
	Minimum	14	7	19	21	26	31	26	26	21	13	30	22	15	18	25	28	30	24	19	20	-1	16	18	23	33	47	39	52	45	49	47	25.9
Hinton §	Maximum	35	28	42	50	40	42	44	38	33	52	38	40	44	56	60	75	62	37	40	32	36	42	51	68	69	70	73	72	70	65	60	50.5
	Minimum	27	9	9	22	29	32	27	29	23	17	18	23	19	22	22	29	35	36	22	22	8	10	21	22	25	35	47	46	43	48	50	26.7
Holcomb §	Maximum	32	18	35	41	43	38	39	39	28	45	32	35	40	55	65	66	59	32	29	27	35	37	46	62	66	71	68	65	67	63	62	49.5
	Minimum	30	4	5	12	20	29	27	23	19	3	10	14	8	15	20	27	29	27	8	12	-2	6	10	20	30	41	37	49	39	40	48	21.3
Huntington §	Maximum	25	30	40	43	39	43	41	35	38	50	33	31	45	61	68	68	58	33	31	31	35	41	51	66	70	77	59	68	75	72	59	48.9
	Minimum	25	11	11	20	31	31	33	30	26	24	28	13	15	21	30	44	34	32	25	21	12	14	25	28	31	49	50	51	49	49	50	29.5
Lewisburg	Maximum	41	19	36	40	37	41	38	33	28	45	43	37	38	56	62	69	63	46	34	30	34	38	46	60	63	71	65	68	63	65	61	47.4
	Minimum	11	4	16	24	24	31	23	24	19	14	29	13	17	15	25	27	33	24	16	18	-7	17	16	22	29	47	37	51	44	47	42	24.3
Madison §	Maximum	27	30	43	..	..	47	..	..	45	53	39	37	..	67	71	73	..	..	..	..	30	37	44	37	68	73	78	66	71	78	75	..	54.0
	Minimum	25	11	9	25	..	..	31	..	..	20	30	11	12	..	25	25	35	..	..	..	0	0	14	23	23	28	49	50	49	51	53	20.0
Marlinton	Maximum	38	16	36	42	38	37	36	34	29	45	43	38	38	50	58	65	54	46	32	28	35	38	45	58	62	65	64	62	57	63	56	45.4
	Minimum	16	6	13	22	23	33	30	22	22	10	29	5	8	10	24	25	30	26	20	22	1	18	22	22	26	54	36	50	49	45	41	24.5
Point Pleasant	Maximum	45	31	40	45	41	46	44	38	39	51	46	37	46	63	70	72	61	50	31	34	35	43	51	67	72	78	71	61	71	73	67	52.2
	Minimum	16	9	18	23	29	33	30	28	22	20	26	6	15	27	36	38	28	25	18	17	10	17	28	24	30	46	48	45	44	57	46	27.7
Powellton	Maximum	40	27	37	48	47	43	..	38	36	50	39	35	44	63	70	72	72	58	34	28	41	40	51	66	76	78	70	76	73	77	67	53.2
	Minimum	17	10	23	22	24	33	..	26	26	17	29	18	16	22	35	36	38	28	23	20	3	17	25	26	36	50	46	59	55	58	55	29.8
Robertsburg§	Maximum	24	27	40	41	39	45	41	35	35	57	32	37	45	61	70	69	59	34	29	30	36	41	49	57	72	78	60	64	73	70	63	48.8
	Minimum	24	10	10	20	29	32	32	29	25	19	22	2	4	13	27	35	30	32	20	19	7	8	16	25	27	39	46	48	47	48	48	25.6
Ryan	Maximum	37	24	36	51	41	42	35	32	34	48	40	34	45	60	65	68	61	51	30	33	35	40	50	65	72	77	67	62	70	72	65	49.7
	Minimum	16	8	20	19	25	28	29	26	23	12	27	0	12	19	30	30	28	25	12	17	3	12	23	21	25	46	41	46	43	48	46	24.5
Spencer§	Maximum	23	24	42	32	40	44	43	38	36	51	30	31	50	65	74	73	70	34	30	31	36	43	52	68	76	83	63	63	71	71	65	50.1
	Minimum	22	9	10	15	25	31	31	29	24	14	26	2	-1	10	23	34	33	31	15	14	3	5	21	22	23	30	42	43	41	57	52	23.6
Union	Maximum	26	26	40	43	38	40	41	38	40	46	35	44	42	65	69	72	57	35	33	30	39	36	44	63	60	69	66	67	70	65	54	48.2
	Minimum	18	5	8	21	28	31	25	28	20	16	32	22	19	20	29	32	33	33	19	22	-1	1	12	21	33	40	39	53	54	45	46	25.9
Williamson§	Maximum	21	29	41	45	43	44	39	40	32	49	33	35	44	61	69	71	59	33	30	28	33	40	50	65	68	75	63	71	74	65	60	48.7
	Minimum	21	10	10	15	29	32	28	29	25	21	21	20	20	20	25	31	36	33	20	20	5	5	12	27	27	34	47	50	51	53	53	26.8

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


No Rain
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
Statute Miles
Kilometers

,OS
WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

APRIL, 1914

BY
HENRY C. HOWE
SECTION DIRECTOR

CLEVELAND, OHIO
WEATHER BUREAU OFFICE
MAY 27, 1914

Departure of the Mean Temperature from the Normal, April, 1914.


+3°
+3°
+3°
-3°
-3°
-3°
+
−
+
−
+
−

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXII. PARKERSBURG, W. VA., APRIL, 1914. NO. 4.

GENERAL SUMMARY.

April was slightly warmer and considerably wetter than usual. The precipitation was quite favorably distributed over the State and throughout the month. The snowfall was unimportant. The highest and lowest temperatures were well within previous April records. In most sections freezing temperatures did not occur during the last 10 days and the conditions were favorable for growth during the last week. The sunshine was practically normal. Farm work was much retarded by frequent rains.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.07 inches. The highest and lowest pressures observed were as follows: Parkersburg, 30.39 inches on the 23d and 29.76 inches on the 15th. Elkins, 30.34 inches on the 23d and 29.65 inches on the 8th. Low pressure areas of slight or moderate intensity crossed the State on the 1st, 7th, 14-15th, 18-19th, and 25-28th. The pressures were high on the 3d-4th, 9-10th, 13th, 20th-23d, and 29-30th.

TEMPERATURE.

The monthly mean for the State, as shown by the records of 47 stations, was 52.1°. The mean departure from the normal for 39 stations having ten or more years of record was plus 0.7 of a degree. The month opened with the temperature somewhat above the normal, but cool weather prevailed from the 3d to 7th. The morning temperatures on the 6th were unseasonably low. The 7th was a warm day. Abnormally cool weather prevailed from the 8th to 11th, and the temperatures continued generally slightly below normal until the 18th. Warm weather prevailed on the 18-19th and cool weather on the 20th-21st. The warmest weather for the month prevailed from the 24th to 29th. Cooler weather set in on the 30th.

HUMIDITY.

The average of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m. were as follows: Parkersburg, 8 a. m., 73 per cent; 8 p. m., 64 per cent. Elkins, 8 a. m., 79 per cent; 8 p. m., 69 per cent. For Parkersburg the April averages for 25 years for the same hours are 75 and 63 per cent. The April averages for Elkins for 15 years are 80 and 64 per cent.

PRECIPITATION.

The monthly mean for the State, as shown by the records of 57 stations, was 4.63 inches. The departure from the normal for 47 stations having ten or more years of record was plus 0.83 of an inch. The precipitation was lightest over the southern half of the State, especially the southeast counties. The amounts were greatest over the central mountain sections. Most of the precipitation occurred on the 1st-3d, 8th, 12th, 15-16th, 19-20th, and 25-26th. The amounts were greatest on the 15-16th and 25-26th. Light snow or snow flurries occurred in many sections on the 3d, 5th, and 8th.

WIND.

The average wind velocity at Parkersburg was 6.9 miles per hour, or 0.1 of a mile above the April average for 25 years. The average for Elkins was 4.6 miles per hour, or 0.5 of a mile below the April average for 15 years. The highest velocity at Parkersburg was 36 miles per hour on the 25th. The highest at Elkins was 27 miles per hour on the 1st.

SUNSHINE AND CLOUDINESS.

The sunshine at Parkersburg averaged 47 per cent of the possible amount, or 1 per cent below the April average for 17 years. The average for Elkins was 42 per cent, or 2 per cent below the April average for 15 years.

MISCELLANEOUS PHENOMENA.

Hail: Creston, 18th and 25th; Elkins, 25th; Morgantown, 25th; Parkersburg, 18th.

Halo, lunar: Bayard, 5th; Elkins, 4th; Parkersburg, 28th; Pickens, 4th; Ryan, 5th.

Halo, Solar: Elkins, 23d; Lost City, 14th; Ryan, 4th; Wellsburg, 14th, 23d and 27th.

Haze: Bayard, 19th and 25th.

Sleet: Parkersburg, 3d and 8th; Robertsburg, 3d; Wheeling, 8th and 18th.

Thunderstorms (Dates and number of stations reporting): 1st, 5; 3d, 3; 7th, 1; 15th, 1; 17th, 2; 18th, 14; 19th, 9; 20th, 1; 24th, 3; 25th, 12; 26th, 3; 28th, 1.

COMPARATIVE DATA FOR APRIL.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in inches.
1891	52.0	..	..	2.81	....
1892	50.6	87	17	4.28	....
1893	53.4	92	20	5.18	....
1894	50.6	90	14	3.32	....
1895	52.9	90	17	2.93	....
1896	57.7	95	12	2.06	....
1897	51.5	90	19	2.97	....
1898	48.0	86	2	3.14	....
1899	53.4	93	18	1.84	0.5
1900	51.8	88	16	1.35	T.
1901	47.5	95	18	7.05	6.0
1902	49.8	96	21	3.06	10.0
1903	51.3	91	8	4.47	0.4
1904	47.7	82	12	3.15	1.3
1905	52.2	89	14	2.78	1.5
1906	54.1	92	15	3.16	0.3
1907	45.6	92	10	3.49	6.1
1908	54.8	92	18	4.30	0.3
1909	53.0	93	10	5.04	2.4
1910	53.2	91	16	3.39	0.6
1911	49.5	88	6	4.29	1.5
1912	55.4	88	20	4.03	0.2
1913	52.4	92	12	2.99	0.1
1914	52.1	93	16	4.63	0.2
Entire period	51.7	96	2	3.57	2.0

Climatological Data for April, 1914.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	47.0	0.0	82	19	18	6	53	6.86	+2.89	1.35	2.0	13	8	12	10	w.	Solomon Clark
Burlington	Mineral	875	20	50.1	−0.6	84	18	20	6	52	4.22	+1.71	1.47	0	5	10	13	7	w.	J. W. Vandiver
Franklin	Pendleton	641	8	46.2	.....	87	24	25	6	42	.....	.....	.....	.....	.....	13	9	8	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	4.57	+1.67	1.81	0	9	.....	.....	.....	w.	S. W. Lightner
Lost City	Hardy	.....	8	48.6	.....	75	29	22	6	38	3.09	.....	1.08	0	6	9	16	5	n.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	50.8	−0.4	84	19†	25	6	47	4.31	+1.37	1.24	0	9	16	8	6	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	54.9	+3.0	88	18	22	6	44	4.41	+1.71	1.66	0	6	8	18	4	nw.	John C. Fisher
Upper Tract	Pendleton	1,230	15	52.3	+1.1	87	28	21	6†	50	2.30	−0.17	1.00	0	4	5[b]	15[b]	8[b]	w.	J. M. Mallow
Averages and	Extremes	.....	....	50.0	+0.6	88	18	18	6	53	4.25	+1.53	1.81	0.3	7	10	13	7	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	52.8	+0.9	86	28	24	10	39	3.93	−0.45	0.72	0	12	19	5	6	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	5.53	.....	1.10	.....	14	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	50.6	−0.3	86	28	20	10	46	6.14	+1.93	0.92	T.	12	13	5	12	.....	H. A. Darnall
Cairo	Ritchie	674	12	53.4	−1.2	90	29	20	10	40	4.85	+1.09	0.70	T.	12	3	18	9	.....	Van A. Zevely
Central Station	Doddridge	950	12	52.5	+1.3	90	28	19	10	47	2.40	−0.55	0.48	T.	12	7	9	14	w.	G. W. Sherwood
Cheat Bridge*	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	5.50	.....	1.10	.....	9	.....	.....	.....	.....	Franz A. Degler
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	6.51	.....	1.61	.....	9	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	55.0	+2.7	92	28	26	10	49	5.48	+1.41	1.70	0	11	7	8	15	sw.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	6.68	.....	2.00	1.5	12	.....	.....	.....	sw.	Ross C. Mabe
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	4.26	.....	0.83	0	10	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	49.2	+0.5	86	28	20	10	49	6.97	+3.68	2.02	T.	18	7	9	14	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	51.6	−0.5	91	22†	20	10	55	4.64	+1.05	0.91	T.	15	16	1	13	w.	F. P. Hall
Glenville	Gilmer	738	25	55.4	+2.5	92	28	21	6	50	6.10	+2.34	1.60	0	10	9	10	11	w.	Joe N. Craddock
Grafton	Taylor	1,000	22	54.0	+2.6	88	18†	20	10	50	4.42	+0.56	0.85	T.	13	15	2	13	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	49.2	−0.6	88	25	16	6†	49	4.39	+0.93	1.07	T.	9	15	6	9	w.	Allen Smith
Mannington	Marion	974	12	51.4	+0.1	88	28	20	10	49	4.68	+0.47	0.98	0.7	13	10	4	16	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	52.4	+1.3	87	28	24	9	38	5.40	+2.00	0.90	T.	9	2	20	8	.....	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	.....	.....	91	28†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. L. Brown
New Cumberland*	Hancock	987	15	49.2	−0.3	87	28	21	6†	44	3.70	+0.18	0.70	T.	12	6	5	19	s.	Frank S. Evans
New Martinsville	Wetzel	634	21	53.6	+0.6	90	28	24	10	46	4.25	+0.69	0.70	T.	11	8	9	13	s.	Wm. Ankrom
Osceola	Randolph	3,600	0	.....	.....	.....	.....	.....	.....	.....	8.85	.....	2.25	1.0	11	.....	.....	.....	w.	A. F. Dohmer
Parkersburg	Wood	638	26	53.9	+1.0	89	28	26	10	38	4.38	+1.47	1.06	T.	14	8	8	14	n.	U. S. Weather Bureau
Parsons*	Tucker	1,656	15	49.6	+0.8	86	28	17	10	53	5.80	+1.98	1.45	3.0	11	9	11	10	.....	J. W. Swisher
Philippi	Barbour	1,149	22	51.9	+1.0	89	26†	19	10	54	5.65	+1.63	1.00	0.1	15	8	13	9	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	48.1	−0.2	82	28	18	9†	43	10.05	+5.07	1.94	3.0	14	9	7	14	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	6.83	+2.82	1.34	T.	15	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	4.46	.....	1.20	0	10	.....	.....	.....	.....	J. O. Goodman
Smithfield	Wetzel	835	10	49.2	.....	91	28	26	9	40	3.28	+0.83	0.88	T.	12	14	7	9	n.	G. M. Whisler
Terra Alta	Preston	2,612	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Wm. R. Shaw
Wellsburg[d]	Brooke	1,225	20	47.6	−1.0	83	28	21	9	31	4.14	+0.96	0.94	1.2	13	6	10	10	sw.	C. P. Waugh
Weston[a]	Lewis	1,026	26	50.8	−1.6	88	28	22	6†	46[b]	3.01	−1.34	0.88	1.0	11	9	11	9	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	51.3	.....	91	28	24	9	52	4.88	+1.80	1.30	0.5	14	9	7	14	s.	Miss M. B. Forsyth
Averages and	Extremes	.....	.....	51.7	+0.5	92	28	16	6†	55	5.27	+1.35	2.25	0.4	12	10	8	12	w.	
Southern Section.																				
Bancroft	Putnam	574	11	.....	.....	.....	.....	24	10	....	5.27	+1.31	1.60	T.	10	1	0	29	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	51.2	+2.2	84	28	22	9†	46	4.07	+0.17	1.56	0	7	14	6	10	w.	John A. Ewart
Bluefield[e]	Mercer	2,558	20	55.1	+1.7	84	27	21	10	....	1.29	−2.43	0.40	0	6	13[b]	7[b]	8[b]	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	57.6	+1.0	90	28	28	9†	41	5.18	+1.58	1.10	T.	13	12	6	12	w.	R. C. Hewes
Cuba	Jackson	650	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. T. Perry
Doane	Wayne	717	7	.....	.....	92	27	.....	.....	.....	3.09	.....	1.29	0	5	10	14	6	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	53.4	+0.3	86	28	24	10	46	3.53	−0.15	0.90	T.	9	13	11	6	w.	J. J. Lincoln
Green Sulphur Spgs.	Summers	1,600	19	52.2	+1.4	87	28	18	10	47	3.56	+0.36	0.74	T.	11	6	9	15	w.	Arthur George
Hinton	do	1,450	25	53.6	+0.3	89	28	22	10	45	3.30	0.00	0.72	0	11	9	3	18	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	50.4	.....	86	28	19	10	54	6.66	.....	1.34	0.5	14	9	2	19	.....	R. E. Ferguson
Huntington	Cabell	538	19	55.5	+1.9	91	28	26	11	45	4.34	+0.58	1.70	T.	8	12	0	18	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	51.2	+1.1	84	28	17	10	45	3.70	+0.31	0.84	T.	10	20	3	7	nw.	Geo. T. Argabrite
Madison	Boone	704	9	55.8[c]	.....	92[c]	28	24[b]	10	49[d]	4.81	.....	1.33	0	9	11[b]	10[b]	7[b]	.....	S. E. Bradley
Marlinton[a]	Pocahontas	2,131	18	48.6	+1.1	78	28	16	10	44	4.58	+1.49	1.24	0	12	13	12	4	.....	C. J. McCarty
Nuttallburg	Fayette	2,252	22	.....	.....	.....	.....	21	10	....	3.63	+0.32	0.75	0	10	.....	.....	.....	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	55.8	+0.9	91	28	24	10	47	5.14	+1.84	1.64	0	12	7	5	18	nw.	W. D. Holmes
Powellton[b]	Fayette	933	17	55.0	+0.9	91	27	23	10	46	4.29	+0.47	0.80	T.	14	8[a]	14[a]	7[a]	.....	Morris Hansford
Princeton	Mercer	2,395	14	49.4	0.0	82	28	16	10	42	3.40	−2.50	1.25	0	6	12	14	4	w.	H. Scott
Robertsburg	Putnam	574	14	53.8	+0.8	92	27	23	10	46	4.64	+0.61	1.42	T.	10	11	0	19	n.	E. P. Turley
Ryan	Roane	700	11	54.0	+1.5	89	28	18	10	50	5.14	+1.16	0.84	0.3	15	9	8	13	.....	Wm. E. Ryan
Spencer	do	784	16	51.8	.....	93	28	19	10	56	3.75	+0.26	1.10	0	8	7	10	13	.....	A. M. McKown
Sutton	Braxton	839	11	56.4[f]	.....	91[f]	28	20[f]	10	54[f]	2.10	−2.68	1.00	0	5	11	9	10	.....	Ben Gillespie
Union	Monroe	2,250	10	51.8	+1.1	85	18	17	10	46	2.27	−1.06	0.65	0	6	.....	.....	.....	.....	Shelton Clark
Williamson	Mingo	660	13	53.6	−1.8	88	28	24	10	44	4.06	−0.22	1.08	0	10	17	2	11	w.	J. F. Keyser
Averages and	Extremes	.....	....	53.3	+0.9	93	28	16	10	56	3.99	+0.07	1.70	T.	10	11	7	12	w.	
State Averages and	Extremes	.....	....	52.1	+0.7	93	28	16	6†	56	4.63	+0.83	2.25	0.2	11	10	9	11	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for April, 1914.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac	.57	.88	.54		T.	T.		.41			T.	.18			1.35	.64			.07	.76	.06				.21	1.09		T.	.10	T.		6.86
Burlington	do	.20		.10					1.00						T.	1.45				T.	T.				T.	1.47						4.22
Harpers Ferry	do	.10	.11	.03				T.		.42						.38	.72				.40	.60				1.81						4.57
Lost City	do	.06							.20							1.08		.05			.65					1.05				T.		3.09
Martinsburg	do	.38		.08					.58			.07				1.24					.66					* 1.20			.10			4.31
Moorefield	do	.05							.75							1.66			T.				1.55		.25		T.	.15			4.41
Romney	do																															
Upper Tract	do	T.	T.						.20							.90	T.				.20				T.	1.00						2.30
Northern Section.																																	
Bens Run	Ohio	.72	*	.10		.02			.62				.34			.47	.09		.15	.46	.34					.62						3.93
Brandonville	Monongahela		.72		.38	.03				.38			.26			.21	.73	.05		.48	.58	.17				.15	1.10		.29			5.53
Buckhannon	do	.80	.35	.22		T.		T.	.70			T.	.25			.80	.23		.12		.85					.35	.92			.55		6.14
Cairo	Little Kanawha	.47	.60	.19		T.			.70	.08			.24			.42	.14			.64	.35					.50	.52					4.85
Central Station	Middle Is. Creek	.29	.05	.06		T.		T.	.48			T.	.17		.02	.19	T.		.30	.20	.27					.30	.07			T.	T.	2.40
Cheat Bridge	Monongahela																															
Cortland	do	.13	.87						.81							.70	1.00				.80					.42	1.61		.17			6.51
Creston	Little Kanawha	.21	.80	.07					.28	.45			.15			.20	.40			.29	.93	T.				1.70						5.48
Davis	Monongahela	.24		.52	T.				.40	T.	T.		.47			.60	1.00	.15			.80	T.	.17		T.	2.00			.23	.10		6.68
Elizabeth	Little Kanawha	.24	.78	.04					.44	.24			.20			.33	.33				.83					.83						4.26
Elkins***	Monongahela	.73	.38	.15	T.	T.		.23	.50	T.		.06	.04		.10	.83	.37		T.	.64	.64	.01			T.	1.37	.78		.03	.10	.01	6.97
Fairmont	do	.10	.55	.32	.01	T.	T.		.15	.45			.38			.37	.60	.02		.14	.47	.14				.03	.91					4.64
Glenville	Little Kanawha		.42	.62					.37	.85	T.		.35			.42	.18				1.17	.12				1.60						6.10
Gratton	Monongahela	.08	.76	.28						.30	.35					.82	.10	.05		.18	.50	.10				.05	.85					4.42
Lost Creek	do	1.04	T.	.10				T.	.68	T.		T.	.10		T.	.48	T.		T.	.38	.54					.45	.62		T.			4.39
Mannington	do	.57	.35	.27		.02			.70			.04	.20			.87	.11			.28	.41	T.				.43	.43					4.68
Morgantown	do	.65		.27					.53							.83	.90			.35	.57					.60			.70			5.40
Moundsville	Ohio																															
New Cumberland	do	.40	.10	.10			T.	.40	.70			.10				.60	T.		.30	.10	.20			T.		.60	.10					3.70
New Martinsville	do	.70	.25	.25		T.			.35				.30			.65	.05			.40	.40					.50	.40					4.25
Osceola	Monongahela	.15	.75	.35		T.			1.00	.70						1.05	1.30	.15			.90	.25				2.25						8.85
Parkersburg ***	Ohio	.88	.04	.07		T.		.26	.18			.20			.13	.40	.04		.35	.70	.07					.99	.07		T.	T.	T.	4.38
Parsons	Monongahela	T.	1.45	.20					.55	.10			.05		T.	.50	.60			T.	.60				*	1.45			.30			5.80
Philippi	do	.72	.43	.23		.01		T.	.54	T.			.27		T.	1.00	.18		.14	.36	.84	.02				.35	.54			.02	T.	5.65
Pickens	do	1.90	.91	.10					.89	.10		T.	.52		.62	1.01			.52	1.13						.26	1.68			.35	.06	10.05
Rowlesburg	do	.12	1.24	.78	.12		.02		.20	.36			.30			.26	.88	.10		.10	.90	.30				1.05						6.83
Saint Marys	Ohio	.10	.70	.20					.50	.06			.20			.25				.23	1.02					T.	1.20					4.46
Smithfield	Fishing Creek	.28	.12				.41	.23									.46	.21	.15	.12		.05	.16	.21			.88					3.28
Terra Alta	Monongahela																															
Wellsburg	Ohio	.30	.13	.18		.02		.10	.81			.12	.02			.48				*	.63					.94	.41			T.			4.14
Weston	Monongahela	.03	.70	.16	.10				.28	.48			.08			T.		.06			.72	.16									.24		3.01
Wheeling	Ohio	.01	.50	.30	T.	.05	T.	T.	.55	.20			.20			.07	.65		T.	.40	.60	T.		T.		.20	1.10			.05			4.88
Southern Section.																																	
Bancroft	Great Kanawha	.04	.40						.74	.15			.08			.13	.91			.05	1.17					1.60						5.27
Beckley	do							.72	1.56			.41			.46	.50			.22						.20							4.07
Bluefield	do	.28	.06												.40	.35	.15					.05										1.29
Charleston	do	.05	.32	T.					.70	.30			.25			.28	.94			.06	1.02	.03				1.10				.03	.10	5.18
Cuba	Sand Creek																															
Doane	Big Sandy	.15						.20	1.25						.20	1.29																	3.09
Elkhorn	do	.50							.90	T.			.25		.42	.46	.03		.23	.52	.22												3.53
Green Sulphur Spgs.	Great Kanawha	.33	.10	.01					.74	T.			.25		.28	.35	.33				.60	.02				.55				T.			3.56
Hinton	do	.16	.28	.02					.52	.20			T.			.60	.50				.48	.06				.30					.18	3.30
Holcomb	do	*	.45					*	*	1.47		.22			*	*	1.20			*	1.28				*	1.34				.70		6.66
Huntington	Ohio	.32	.28	T.					.48	.14						.32	.24				.86					1.70				T.	T.	4.34
Lewisburg	Great Kanawha	.40	.04	T.					.43				.17		.31	.61	.16				.84				.05	.69				T.			3.70
Logan	Guyandotte																															
Madison	Great Kanawha	T.	.30	T.	T.					.90			.20			.33	.66			T.	1.33				T.	1.00	.07		.02			4.81
Marlinton	do	.52	.09	.07					1.00				.08		.10	.64	.12		.02		.69	.01				1.24						4.58
Nuttallburg	do	.35						.04	.75				T.		.30	.40	.15		.02		.70	.05	.57									3.63
Point Pleasant	Ohio	.06	.74	.02					.40	.24			.20			.18	.90			.08	.66					1.64					.02	5.14
Powellton	Great Kanawha	.40	.17						.75	.02			.18		.22	.60	.61			.30	.80	.02			.02	.18			.02			4.29
Princeton	do	1.25						.75				.30			.50	.50										.10						3.40
Robertsburg	do	.20	.55	.04					.42	.10			.17			.12	.82	T.			.80					1.42						4.64
Ryan	do	.53	.22	.03				.05	.84			.01	.15		.08	.70	.18		.02	.65	.33					.75	.60			T.	T.	5.14
Spencer	Little Kanawha	.10							.45	.40			.26				.60			.06	.78					1.10						3.75
Sutton	Great Kanawha	T.	.10	T.	T.				.10							T.	.10				1.00					.80				T.		2.10
Union	do	.15	.15						.55							.65	.42									.35						2.27
Williamson	Big Sandy	.18	.20						.92	.16			.24			.38	.52	.36			1.06					.04				T.		4.06

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T Trace, or less than 0.01 inch.

Daily Temperatures for April, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	55	55	38	41	40	60	66	63	34	49	57	54	59	60	53	40	61	81	82	60	54	74	75	65	63	69	77	79	73	69	..	60.2
	Minimum	39	37	29	25	28	18	34	29	19	23	22	35	28	27	34	35	30	28	46	40	30	37	40	37	40	46	49	39	51	39	..	33.8
Burlington	Maximum	56	58	48	41	44	64	68	63	42	52	66	61	62	62	49	49	67	84	83	61	68	80	65	62	56	76	80	81	79	60	..	62.9
	Minimum	41	44	35	35	32	20	38	34	27	24	24	43	32	29	41	39	35	32	46	43	38	37	47	38	43	47	45	45	44	42	..	37.3
Lost City	Maximum	56	56	46	45	49	54	66	58	38	45	56	60	57	52	47	46	60	74	73	64	56	74	70	58	55	65	72	70	75	64	..	58.7
	Minimum	40	44	38	28	30	22	38	38	24	28	35	38	42	35	42	41	38	36	52	46	35	41	48	42	39	45	46	42	48	32	..	38.4
Martinsburg§	Maximum	59	57	45	50	49	61	74	59	45	55	67	65	60	58	45	50	68	83	84	57	58	84	66	63	52	78	75	79	83	60	..	63.0
	Minimum	40	40	38	27	32	25	27	41	28	28	31	34	39	34	35	40	40	39	42	53	40	38	40	40	43	45	48	48	50	56	..	38.7
Moorefield	Maximum	54	65	56	54	56	66	65	48	44	40	50	54	56	60	54	65	75	88	78	75	73	60	70	75	72	76	87	85	76	62	..	64.5
	Minimum	40	50	44	38	32	22	36	38	30	26	40	44	48	54	48	38	40	64	54	58	45	48	42	42	56	58	62	52	62	48	..	45.3
Romney §	Maximum	54	55	60	60	45	44	45	58	65	62	65	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	39	41	43	32	30	22	30	26	32	26	38	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Upper Tract	Maximum	61	60	47	67	56	65	73	66	40	54	66	62	63	67	53	50	67	84	79	68	62	75	75	70	62	72	82	87	77	70	..	66.0
	Minimum	41	45	36	28	28	21	43	38	27	21	34	43	41	30	38	39	32	34	39	44	35	40	40	41	50	50	52	45	57	45	..	38.6
Northern Section.																																	
Ben's Run	Maximum	62	55	45	45	46	63	72	56	40	52	57	58	65	64	56	57	72	83	73	55	56	77	68	80	77	75	84	86	76	68	..	64.1
	Minimum	49	45	36	34	33	26	43	30	26	24	29	34	33	35	45	42	36	44	53	39	37	39	55	47	57	60	50	56	62	46	..	41.5
Buckhannon	Maximum	62	55	45	48	44	65	76	45	40	50	61	66	60	62	52	49	67	84	54	70	68	77	63	80	80	73	78	86	76	71	..	63.6
	Minimum	48	41	33	30	32	22	30	31	24	20	27	38	30	32	43	39	30	38	29	40	40	33	48	44	52	57	48	48	60	40	..	37.6
Central Station	Maximum	62	55	45	48	44	67	72	61	41	53	61	59	63	64	52	55	72	87	75	55	56	81	75	82	81	77	83	90	84	73	..	65.8
	Minimum	47	43	34	31	29	20	44	29	25	19	28	37	28	31	44	41	30	41	55	41	35	37	43	45	57	59	47	51	62	43	..	39.2
Creston	Maximum	77	63	48	53	49	69	77	63	46	56	65	62	69	63	54	61	77	90	75	57	59	83	74	85	82	77	87	92	81	72	..	68.9
	Minimum	47	41	36	34	31	28	44	32	28	26	28	40	30	34	44	34	34	41	52	42	38	37	48	48	60	60	50	54	63	48	..	41.1
Elkins	Maximum	60	51	43	48	39	64	70	52	36	51	59	55	61	58	48	45	65	83	77	50	56	76	71	80	77	71	78	85	72	61	..	61.4
	Minimum	44	39	29	29	26	21	43	26	22	20	29	36	32	30	43	37	32	34	49	33	32	35	44	46	55	56	51	46	57	36	..	37.1
Fairmont§	Maximum	60	48	40	49	46	68	73	39	42	55	62	63	68	68	49	50	74	89	78	50	56	91	69	83	79	77	85	91	78	54	..	64.5
	Minimum	45	44	35	31	32	23	26	39	26	20	27	37	30	33	37	39	32	34	44	50	35	37	44	45	50	59	51	49	57	53	..	38.8
Glenville	Maximum	75	65	57	55	51	70	80	70	47	49	51	65	70	65	54	59	74	90	83	55	65	83	76	87	85	83	87	92	85	76	..	70.2
	Minimum	57	45	35	33	32	21	47	31	27	29	33	34	29	33	44	41	33	40	55	40	37	36	37	47	61	60	50	51	60	39	..	40.6
Grafton	Maximum	65	60	45	47	48	65	43	72	45	55	61	60	66	65	61	47	69	88	88	60	72	80	80	80	75	76	79	88	88	76	..	67.8
	Minimum	47	44	34	33	32	23	43	29	22	20	49	40	30	32	46	41	35	38	38	44	36	32	46	45	63	60	50	48	59	44	..	40.1
Lost Creek	Maximum	56	54	40	45	42	63	72	62	39	51	59	56	60	61	48	50	68	84	76	52	53	76	68	77	88	72	81	86	72	65	..	62.5
	Minimum	46	40	32	29	29	16	43	28	23	16	23	36	21	28	42	35	22	35	48	38	33	35	43	42	50	47	45	45	59	41	..	36.0
Mannington	Maximum	60	59	43	46	42	64	70	63	40	50	59	58	59	65	58	50	68	86	76	59	52	80	75	77	79	74	79	88	83	74	..	64.5
	Minimum	48	43	33	32	32	21	42	30	26	20	26	36	29	29	46	40	30	37	48	42	36	34	43	43	49	58	48	47	59	44	..	38.4
Morgantown	Maximum	69	57	43	46	41	63	69	60	37	50	58	57	58	66	68	47	67	84	78	57	51	76	68	72	79	79	73	87	83	71	..	63.5
	Minimum	47	41	33	29	30	25	48	29	24	26	37	36	32	35	43	37	38	50	56	41	35	46	42	48	57	59	49	59	67	42	..	41.4
New Cumberland	Maximum	57	57	40	42	44	54	56	51	35	48	52	60	58	69	58	51	70	86	74	56	52	73	60	67	72	76	80	87	77	62	..	60.8
	Minimum	46	40	30	24	23	21	43	30	21	26	34	29	27	27	42	39	34	42	56	37	35	46	36	40	50	59	42	52	60	38	..	37.7
New Martinsville	Maximum	61	55	46	47	45	64	70	61	40	54	58	60	62	58	60	58	73	88	75	59	57	81	69	80	80	80	84	90	85	84	..	66.1
	Minimum	49	43	35	33	33	25	44	31	26	24	30	35	32	33	45	42	35	42	54	42	37	40	44	48	55	59	52	54	62	47	..	41.0
Parkersburg	Maximum	64	51	47	45	44	66	71	55	40	51	58	58	60	64	54	59	72	87	73	54	58	82	68	83	79	79	82	89	77	60	..	64.3
	Minimum	49	46	35	34	33	28	48	29	26	26	36	38	37	41	45	44	40	51	54	38	38	46	46	52	61	61	57	63	60	43	..	43.5
Parsons	Maximum	58	55	40	46	41	65	70	59	39	57	62	57	61	63	60	58	66	84	79	50	55	76	71	78	77	72	79	86	73	60	..	63.2
	Minimum	40	37	32	30	30	29	38	29	24	17	23	38	28	28	33	36	34	31	48	39	33	31	42	42	48	52	46	43	55	42	..	35.9
Philippi	Maximum	60	59	45	46	43	66	73	64	41	52	61	58	62	64	57	49	68	82	78	59	53	78	70	81	80	89	88	89	79	71	..	65.5
	Minimum	48	40	33	31	31	21	45	32	26	19	26	40	29	30	42	40	31	40	52	42	35	37	45	43	60	35	47	46	61	43	..	38.3
Pickens	Maximum	56	48	40	36	34	67	67	41	45	57	60	54	65	53	48	60	80	72	52	44	52	77	71	78	77	67	77	82	69	58	..	59.6
	Minimum	44	37	28	27	28	24	41	24	18	18	34	35	29	34	35	32	40	52	30	30	28	38	44	48	54	55	48	48	58	38	..	36.6
Wellsburg	Maximum	55	53	39	38	41	56	59	53	32	46	53	54	52	64	56	..	..	..	..	48	50	70	60	69	73	72	74	83	73	66	..	57.3
	Minimum	47	38	29	25	27	25	43	26	21	27	32	32	29	34	42	..	..	..	..	35	35	42	38	44	50	58	47	55	64	39	..	37.8
Weston §	Maximum	60	50	42	50	40	68	70	46	40	54	56	58	62	64	60	54	70	68	72	52	60	74	68	..	72	78	80	88	74	62	..	61.8
	Minimum	48	44	32	32	34	22	28	44	28	22	28	30	32	36	38	36	34	38	38	40	36	38	56	48	..	50	56	62	64	58	..	39.7
Wheeling §	Maximum	59	47	39	44	49	64	66	36	44	57	58	62	65	69	50	54	75	90	77	49	57	59	81	77	79	80	85	91	79	57	..	63.3
	Minimum	45	45	34	29	31	26	32	35	24	26	31	32	31	32	38	41	36	38	53	47	32	39	44	47	49	56	50	54	58	45	..	39.3
Southern Section.																																	
Beckley	Maximum	62	54	54	50	53	59	57	52	40	68	70	60	63	63	54	55	67	78	68	66	65	74	74	74	78	79	78	84	80	75	..	65.1
	Minimum	41	36	33	31	30	42	40	40	22	22	31	30	29	42	45	30	33	40	38	35	33	42	40	47	40	47	46	56	40	40	..	37.4
Bluefield	Maximum	61	56	50	57	..	64	70	63	..	..	62	..	65	65	49	57	70	82	70	61	63	77	80	75	76	..	84	83	79	67	..	67.4
	Minimum	40	44	38	26	..	29	47	32	..	21	..	..	30	43	41	45	37	49	57	38	31	40	50	54	51	..	50	59	64	54	..	42.8
Charleston	Maximum	69	65	50	53	53	71	70	64	44	58	66	60	67	67	56	62	75	85	82	52	63	80	80	85	81	79	85	90	89	78	..	69.3
	Minimum	52	48	40	37	36	30	45	34	28	28	37	39	37	44	48	47	43	51	50	45	40	44	55	56	69	57	58	62	67	50	..	45.9
Elkhorn	Maximum	59	58	48	53	50	65	68	66	48	50	60	56	67	65	52	60	68	78	72	67	63	80	81	79	76	74	80	86	85	69	..	66.1
	Minimum	45	41	38	29	33	30	44	32	25	24	30	28	32	45	45	47	42	50	49	40	35	34	42	50	48	47	50	52	60	55	..	40.7
Green Sulphur Spgs.	Maximum	57	57	48	58	54	68	74	65	40	54	64	58	68	59	50	55	71	83	75	64	63	81	80	76	81	76	84	87	79	67	..	66.5
	Minimum	42	42	36	31	30	22	37	32	23	18	28	41	21	38	43	33	32	37	50	39	34	34	46	47	47	57	48	52	55	46	..	38.0
Hinton §	Maximum	58	54	55	61	50	70	75	55	44	57	56	58	63	65	58	64	73	83	82	57	65	85	82	74	85	79	86	89	77	57	..	67.2
	Minimum	43	43	38	33	33	27	30	44	26	22	25	33	36	37	38	39	40	41	41	48	36	35	45	51	49	53	51	53	56	54	..	40.0
Holcomb §.	Maximum	63	46	40	52	42	77	72	48	40	53	58	64	67	53	53	52	68	72	83	52	61	79	75	80	78	79	82	86	72	55	..	63.4
	Minimum	42	44	33	28	29	23	30	43	22	19	26	27	30	34	42	40	32	37	45	47	30	32	47	49	51	47	44	50	53	50	..	37.5
Huntington §	Maximum	65	52	48	53	51	60	76	40	42	66	63	61	67	60	62	64	78	85	85	66	65	83	72	84	82	81	88	91	78	56	..	67.5
	Minimum	50	48	41	36	36	29	31	35	29	29	26	40	34	39	45	46	40	47	42	47	47	39	50	51	56	61	56	59	64	53	..	43.5
Lewisburg	Maximum	57	55	47	55	51	64	71	62	39	50	64	58	66	58	51	54	68	81	73	63	59	79	77	75	78	74	81	84	79	63	..	64.5
	Minimum	40	44	36	28	29	21	35	31	22	17	26	41	27	36	41	44	31	37	48	39	33	34	48	48	48	57	46	52	53	44	..	37.9
Madison	Maximum	53	68	51	60	..	..	79	40	52	58	66	62	72	80	54	63	78	88	71	47	66	84	77	85	86	79	88	92	77	..	..	69.5
	Minimum	52	42	38	35	34	..	..	34	28	24	33	33	31	31	40	45	40	41	52	45	38	39	48	48	55	56	53	53	57	55	..	42.1
Marlinton	Maximum	52	53	44	52	45	60	68	62	42	50	62	58	65	57	48	48	65	76	70	62	60	76	71	71	73	68	76	78	68	..	..	61.4
	Minimum	46	44	36	29	28	20	32	32	26	16	22	42	26	30	42	40	32	32	40	40	35	32	44	44	46	56	42	41	46	..	..	35.9
Point Pleasant	Maximum	66	60	50	51	51	70	76	60	47	56	65	62	68	63	53	69	78	90	73	58	61	86	78	88	80	80	88	91	83	76	..	69.2
	Minimum	49	46	37	33	34	26	45	30	25	24	35	36	36	37	45	44	37	48	56	40	36	39	46	47	60	58	51	57	66	48	..	42.3
Powellton	Maximum	68	62	60	58	55	72	78	63	43	56	66	62	70	57	54	58	76	..	88	60	63	82	75	85	84	85	91	76	72	..	..	68.5
	Minimum	48	48	45	41	31	26	44	33	27	23	31	42	30	38	48	46	41	..	44	43	36	37	47	52	54	52	55	51	50	..	..	41.5
Robertsburg§	Maximum	61	51	45	52	50	69	76	47	43	56	62	60	66	61	51	62	80	88	73	50	65	82	70	84	80	79	92	88	79	55	..	65.9
	Minimum	48	46	40	34	33	25	30	38	27	23	31	39	30	36	44	44	37	44	52	45	38	38	45	48	54	62	52	55	64	50	..	41.7
Ryan	Maximum	65	55	47	55	55	70	75	57	45	52	62	64	70	73	57	62	74	87	75	56	60	80	73	82	80	80	85	89	79	68	..	67.7
	Minimum	49	45	35	33	38	20	42	30	26	18	26	39	27	47	43	43	31	41	44	41	36	32	46	47	55	60	48	61	61	48	..	40.4
Spencer§	Maximum	56	56	61	53	50	71	79	40	34	57	66	68	69	63	54	53	76	91	75	50	60	84	66	86	81	63	73	93	83	53	..	65.5
	Minimum	48	39	33	34	30	21	40	39	26	19	25	31	28	33	33	34	33	35	58	47	37	34	41	43	40	59	43	53	53	53	..	38.1
Union §	Maximum	59	53	53	56	59	63	72	56	51	52	58	60	67	48	48	54	70	82	70	59	60	80	80	72	76	78	82	85	74	60	..	64.0
	Minimum	44	43	28	30	36	28	32	53	23	17	19	26	28	29	42	44	32	39	56	46	34	34	47	50	47	49	45	55	54	54	..	39.1
Williamson §	Maximum	67	54	50	56	49	69	74	40	42	54	65	58	68	55	51	62	72	85	84	49	63	80	77	81	81	79	85	88	75	60	..	65.8
	Minimum	49	49	40	30	32	29	30	40	27	24	25	32	32	33	44	48	41	43	47	45	36	38	45	47	55	59	54	54	60	54	..	41.4

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


No Precipitation
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

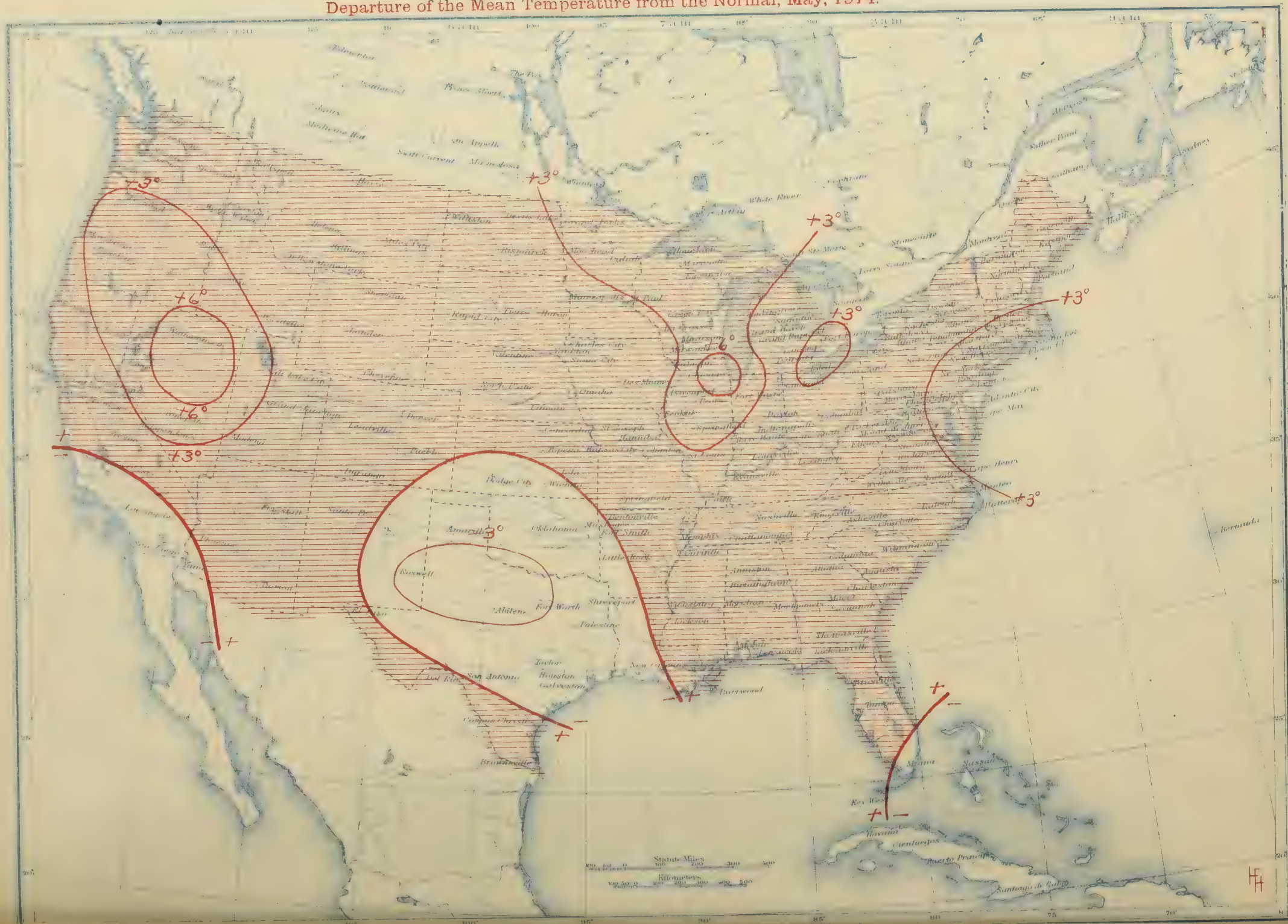
WEST VIRGINIA SECTION

MAY, 1914

BY
HENRY C. HOWE
SECTION DIRECTOR

CLEVELAND, OHIO
WEATHER BUREAU OFFICE
JUNE 22, 1914

Departure of the Mean Temperature from the Normal, May, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXII. PARKERSBURG, W. VA., MAY, 1914. No. 5.

GENERAL SUMMARY.

May, 1914, was characterized by dry weather, an excess of sunshine, and a short period of abnormally high temperatures. Only one month of record from May to August, inclusive, was drier. The average rainfall for May, 1911, was 1.46 inches, or 0.50 of an inch less than the past month. There was no snowfall. More sunshine was received than during any other May of record. While the temperatures averaged practically normal, the highest May temperatures of record occurred in most sections of the State near the close of the last decade. Heavy to killing frosts occurred in the more elevated sections until near the close of the second decade. Considerable damage resulted. Droughty conditions prevailed during the last decade.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.15 inches and 30.14 inches, respectively. The highest and lowest pressures observed were as follows: Parkersburg, 30.55 inches on the 19th and 29.55 inches on the 5th. Elkins, 30.59 inches on the 19th and 29.54 inches on the 5th. Low pressure areas of slight or moderate force crossed the State on the 5th, 8th, and 12th. The pressures were high on the 1st-2d, 14th-21st, and 23d-30th.

TEMPERATURE.

The monthly mean for the State, 49 stations reporting, was 62.4°. The mean departure from the normal for 40 stations having ten or more years of record was plus 0.1°. The month opened cool, the morning temperatures on the 1st and 2d being near or slightly below freezing in many sections. From the 4th to the 6th the temperatures were slightly above the normal. Cool weather prevailed from the 8th to the 9th. The temperatures were somewhat above the normal on the 11th and 12th. Abnormally cool weather prevailed from the 14th to the 18th, with temperatures near or slightly below the freezing point and heavy to killing frosts in the more elevated sections on the 15th, 16th, and 17th. Considerable damage resulted to fruit and early vegetation. The temperatures were near or slightly above the normal from the 19th to the 24th. High temperatures prevailed from the 25th to the 30th. Record temperatures for May occurred in many sections on the 29th. Much cooler weather set in on the 30th.

HUMIDITY.

The average of the humidity readings at 8 a. m. and 8 p. m. at Parkersburg and Elkins, with departures from the normals, were as follows: Parkersburg, 8 a. m., 72 per cent; 8 p. m., 56 per cent. The May averages for the same hours for the past 25 years are 75 and 65 per cent, respectively. Elkins, 8 a. m., 76 per cent; 8 p. m., 56 per cent. The May averages for 8 a. m. and 8 p. m. for the past 15 years are 80 and 66 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 57 stations reporting, was 1.96 inches. The mean departure from the normal for 47 stations having ten or more years of record was minus 2.03 inches. The rainfall was quite favorably distributed over the State. The monthly amounts, however, were heaviest over the west-central counties and lightest over the central and southwest counties. In the mountain sections the rainfall was decidedly below the normal. About three-fifths of the rainfall occurred on the 4-6th. Light showers occurred in many sections on the 7th, 8th, 9th, and 12th. Scattered light showers also occurred on the 22-23d, and 27-30th.

WIND.

The average velocity of the wind at Parkersburg was 4.6 miles per hour, or 0.6 of a mile below the May average for the past 24 years. The average at Elkins was 3.6 miles per hour, or 0.3 of a mile below the May average for the past 15 years. The highest velocity at Parkersburg was 47 miles per hour from the northwest on the 12th. The highest at Elkins was 29 miles per hour from the west on the 12th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 72 per cent of the possible amount, or 16 per cent above the May average for the past 17 years. The highest previous average for Parkersburg for May was 70 per cent in 1911. The lowest May average was 37 per cent in 1899. The average for Elkins was 62 per cent, or 7 per cent above the May average for the past 15 years.

MISCELLANEOUS PHENOMENA.

Hail: Morgantown, 4th; Hinton and Robertsburg, 5th; Sutton, 8th; Mannington and Moundsville, 27th.

Halo, lunar: Parkersburg, 1st.

Halo, Solar: Elkins and Wellsburg, 1st; Bayard, 16th.

Haze: Bayard, 2d, 17th, 18th and 19th.

Thunderstorms (Dates and number of stations reporting): 4th, 10; 5th, 2; 6th, 4; 7th, 2; 8th, 6; 11th, 2; 12th, 3; 13th, 1; 22d, 3; 23d, 1; 26th, 1; 27th, 7; 28th, 7; 29th, 9; 30th, 7.

COMPARATIVE DATA FOR MAY.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in inches.
1891	57.2	..	..	3.18	....
1892	62.2	96	32	5.04	....
1893	59.5	92	30	4.51	....
1894	62.1	100	28	4.44	....
1895	61.6	105	20	2.60	....
1896	68.3	95	33	3.01	....
1897	57.6	90	23	4.60	....
1898	63.0	94	28	4.51	....
1899	64.1	96	35	5.17	0
1900	62.5	98	21	2.99	0
1901	61.8	96	21	6.15	0
1902	65.2	98	25	3.17	0
1903	64.3	95	20	3.03	T.
1904	61.8	98	25	3.55	T.
1905	64.2	96	26	4.95	0
1906	62.7	98	22	2.59	T.
1907	59.0	93	24	3.88	T.
1908	63.4	96	28	6.19	0.1
1909	60.8	93	21	3.82	0.1
1910	57.9	96	19	3.92	T.
1911	66.0	100	22	1.46	T.
1912	63.3	94	31	3.93	T.
1913	61.6	95	19	5.16	0
1914	62.4	100	24	1.96	0
Entire period	62.2	105	19	3.91	T.

Climatological Data for May, 1914.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard[a]	Grant	2,500	12	57.0	−0.2	88	25	24	1	51	1.66	−2.73	1.06	0	5	16	7	7	w.	Solomon Clark
Burlington	Mineral	875	20	62.2	+0.5	94	26	28	1	44	1.00	−2.99	0.60	0	3	11	19	1	w.	J. W. Vandiver
Franklin	Pendleton	641	8	57.8	.....	82	11	29	1	40	1.60	.....	0.80	0	4	22	5	4	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	2.48	−1.28	1.15	0	5	.....	.....	.....	e.	S. W. Lightner
Lost City	Hardy	.....	8	60.8	.....	86	27	32	1	33	1.04	.....	0.47	0	3	10	21	0	w.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	66.2	+3.0	97	27	38	1	41	2.22	−1.19	1.60	0	6	24	5	2	nw.	G. W. Van Metre, C. E.
Moorefield*	Hardy	900	18	64.2	+1.0	96	26	38	2†	38	1.11	−2.75	0.45	0	5	18	13	0	sw.	John C. Fisher
Upper Tract	Pendleton	1,230	15	62.1	+0.3	93	27	28	1	47	0.55	−3.75	0.55	0	1	6	24	1	w.	J. M. Mallow
Averages and	Extremes	.....	....	61.0	+0.9	97	27	24	1	51	1.51	−2.39	1.60	0	4	15	14	2	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	63.5	−0.1	92	29	35	1	38	2.48	−2.22	0.80	0	6	22	6	3	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	3.14	.....	0.83	0	8	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	61.1	−1.1	90	28†	29	1	41	1.78	−2.43	1.08	0	4	25	3	3	.....	H. A. Darnall
Cairo	Ritchie	674	12	64.1	+0.2	97	30	30	1	47	1.98	−1.56	0.85	0	6	5	19	7	.....	Van A. Zevely
Central Station	Doddridge	950	12	62.0[a]	+0.2	94[a]	29	28[a]	1	45[a]	0.55	−3.15	.....	0	5	10	16	5	w.	G. W. Sherwood
Cheat Bridge*	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	1.53	.....	0.60	0	7	.....	.....	.....	.....	Franz A. Degler
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	3.13	.....	1.54	0	4	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	65.0	+1.6	100	29	32	1	46	2.17	−1.37	0.92	0	6	14	12	5	sw.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	2.88	.....	0.83	0	11	19	4	8	sw.	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	2.62	.....	0.92	0	7	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	60.4	+1.3	90	29	29	1	44	1.43	−2.55	1.13	0	8	9	13	9	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	63.8	+1.2	95	29	31	1	45	2.25	−1.78	1.64	0	8	26	3	2	w.	F. P. Hall
Glenville	Gilmer	738	25	65.0	+1.6	98	29	34	1†	47	1.45	−2.66	0.95	0	3	19	8	4	w.	Joe N. Craddock
Grafton	Taylor	1,000	22	63.0	+0.8	94	25†	31	1	46	2.68	−1.68	2.05	0	4	20	6	5	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	59.1	−1.9	91	29	25	1	46	1.89	−2.46	1.80	0	3	23	3	5	w.	Allen Smith
Mannington	Marion	974	12	60.8	−0.7	90	25†	29	1	44	2.04	−1.97	0.69	0	8	18	9	4	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	63.7	+1.0	91	29	31	1	35	2.90	−0.70	1.08	0	7	0	21	10	n.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	64.4	+1.2	97	29	31	1	45	2.40	−0.60	0.73	0	7	13	10	8	w.	M. L. Brown
New Cumberland*	Hancock	987	15	61.1	+0.2	93	29	30	1	41	3.75	+0.59	1.60	0	8	13	8	10	w.	Frank S. Evans
New Martinsville	Wetzel	634	21	64.4	+0.7	93	25†	35	1	43	2.18	−1.46	0.90	0	4	16	9	6	s.	Wm. Ankrom
Osceola	Randolph	3,600	0	.....	.....	.....	.....	.....	.....	.....	1.60	.....	1.35	0	3	11	16	4	w.	A. T. Dohmer
Parkersburg	Wood	638	26	64.8	+1.5	96	29	38	1	35	1.51	−1.95	0.94	0	5	19	7	5	nw.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	59.1	0.0	89	25	29	2†	48	1.05	−3.07	0.35	0	6	18	9	4	.....	J. W. Swisher
Philippi	Barbour	1,149	22	60.8[i]	−0.8	94	29	29[i]	1†	50[i]	1.90	−2.44	1.45	0	8	16	11	4	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	60.1[a]	+0.2	88[a]	12	29[a]	1	42[a]	2.55	−2.56	.....	0	8	22	3	6	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	1.72	−2.56	0.74	0	7	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	1.63	.....	1.04	0	5	.....	.....	.....	.....	J. O. Goodman
Smithfield	Wetzel	835	10	61.9	.....	95	26†	27	1	48	2.92	−0.83	1.17	0	9	14	13	4	n.	G. M. Whisler
Terra Alta	Preston	2,612	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Wm. R. Shaw
Wellsburg	Brooke	1,225	20	61.9	+1.0	88	29	32	1	33	1.89	−1.58	0.90	0	7	15	13	3	w.	C. P. Waugh
Weston	Lewis	1,026	26	62.6	−0.9	94	27†	32	2	40	1.90	−2.40	0.90	0	6	17	9	5	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	64.6	.....	95	26†	34	1†	45	2.15	−1.31	0.82	0	10	19	2	10	sw.	Miss M. B. Forsyth
Averages and	Extremes	.....	....	62.6	+0.4	100	29	25	1	50	2.10	−1.97	2.05	0	6	16	10	5	w.	
Southern Section.																				
Bancroft	Putnam	574	11	64.6	+0.2	97	25	34	1	45	3.45	−0.65	1.48	0	6	20	0	11	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	60.2	+0.6	88	29	31	1	41	2.38	−0.68	0.92	0	4	23	1	7	w.	John A. Ewart
Bluefield	Mercer	2,558	20	62.0[f]	−0.4	89[f]	28†	33[f]	15	41[f]	0.70	−3.17	0.30	0	3	17[c]	9[c]	2[c]	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	66.3	+0.3	96	29	38	17	39	2.27	−2.13	0.85	0	6	19[a]	4[a]	7[a]	w.	R. C. Hewes
Cuba*	Jackson	650	14	62.9	0.0	97	29	30	1	44	2.94	−0.48	1.56	0	7	12	16	3	w.	C. T. Perry
Doane	Wayne	717	7	.....	.....	100	29	.....	.....	.....	3.01	.....	1.00	0	4	22	5	4	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	62.3	−0.4	89	25	36	10	39	1.10	−3.17	0.31	0	6	15	12	4	w.	J. J. Lincoln
Green Sulphur Spgs	Summers	1,600	19	61.5	−0.2	92	29	30	1	46	1.23	−2.32	0.45	0	6	17	6	8	w.	Arthur George
Hinton	do	1,450	25	64.2	−0.1	95	29	34	1	44	1.28	−2.67	0.52	0	5	25	0	6	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	60.4	.....	92	29	30	1†	46	1.75	.....	.....	0	9	17	6	8	.....	R. E. Ferguson
Huntington	Cabell	538	19	65.8	+0.9	97	29	37	1	40	2.00	−2.04	0.88	0	5	22	0	9	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	60.5	−0.4	92	26	29	1	43	0.96	−2.05	0.27	0	6	29	2	0	nw.	Geo. T. Argabrite
Madison	Boone	704	9	65.5[h]	.....	98[h]	29	33[h]	11†	59[i]	1.11	−2.98	.....	0	4	15[g]	4[g]	5[g]	.....	S. E. Bradley
Marlinton*	Pocahontas	2,131	18	53.9[b]	−5.4	86[b]	29	23[b]	1	49[b]	1.54	−2.55	0.88	0	8	17[b]	11[b]	1[b]	.....	C. J. McCarty
Nuttallburg[g]	Fayette	2,252	22	57.3	.....	89	29	31	1	34	1.85	−1.69	0.50	0	6	16[e]	7[e]	3[e]	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	65.0	−0.6	98	29	32	1	43	3.70	−0.07	1.02	0	6	20	2	9	sw.	W. D. Holmes
Powellton[a]	Fayette	933	17	64.8	+0.7	97	29	33	1	50	2.33	−1.73	0.80	0	7	21	6	3	.....	Morris Hansford
Princeton	Mercer	2,395	14	57.9	−1.5	84	25	29	15	46	1.45	−4.06	0.75	0	4	13	14	4	w.	H. Scott
Robertsburg	Putnam	574	14	63.0	−1.4	98	29	32	1	44	2.64	−0.91	1.75	0	6	25	3	3	.....	E. P. Turley
Ryan	Roane	700	11	61.8	−0.8	93	29	28	1	48	2.82	−0.76	1.81	0	7	17	8	6	.....	Wm. E. Ryan
Spencer*	do	784	16	62.8	.....	95	29	28	1	47	2.45	−1.28	1.20	0	5	14	12	5	.....	A. M. McKown
Sutton	Braxton	839	11	64.4[f]	.....	97[f]	29	33[f]	2†	50[i]	1.24	−3.19	0.97	0	2	20	9	2	.....	Ben Gillespie
Union	Monroe	2,250	10	60.7	+0.1	93	29	30	1	44	1.40	−1.25	0.58	0	5	.....	.....	.....	.....	Shelton Clark
Williamson	Mingo	660	13	63.2	−3.0	95	29	36	4	41	1.54	−2.54	0.46	0	7	21	3	7	w.	J. F. Keyser
Averages and	Extremes	.....	....	62.5	−0.4	100	29	23	1	59	1.91	−2.00	1.81	0	5	20	5	6	w.	
State Averages and	Extremes	.....	....	62.4	+0.1	100	29	23	1	59	1.96	−2.03	2.05	0	6	18	8	5	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for May, 1914.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac					1.06	T.	.18	.16					T.	.06								T.					.20	T.		T.		1.66
Burlington	do				.30	.60			.10																T.		T.			T.			1.00
Harpers Ferry	do					.65	.50			.46				.36																		.51	2.48
Lost City	do				.12	.45	.47																										1.04
Martinsburg	do				*	1.60			.42				.05	T.														.05			.10		2.22
Moorefield	do				.05	.45				.21													T.	T.	T.				.25	T.	.15		1.11
Romney	do																																
Upper Tract	do				T.	.55							T.											T.						T.		0.55
Northern Section.																																	
Bens Run	Ohio				.68	.80			.28				.32															.12		.28			2.48
Brandonville	Monongahela					.82	.75		.20					.20	.02								.16						.83	.16			3.14
Buckhannon	do				.30	1.08			.10					T.	T.														.30	T.			1.78
Cairo	Little Kanawha				.02	.85	.21		.35	.08				.47																			1.98
Central Station	Middle Is. Creek				.01	.05	T.		.05				*	.44									T.					T.	T.				0.55
Cheat Bridge	Monongahela					.40	.60	.12	.20					.13	.05															.03				1.53
Cortland	do					.86	1.54																	.30							.43		3.13
Creston	Little Kanawha	T.				.92	.63	.05	.15	.10				.32	T.																			2.17
Davis	Monongahela	.10				.83	.75	.09						.08	.12									.23		T.			.11	.05	.24	.28		2.88
Elizabeth	Little Kanawha					.92	.55		.43	.12	.01			.47														.12						2.62
Elkins***	Monongahela				.04	1.02	.11		.11	T.			.04	.04	.01								T.						T.	T.	.06			1.43
Fairmont	do					1.42	.22		.12				T.	.15										.02					.17	.08	.07			2.25
Glenville	Little Kanawha					.95	.47							.03																				1.45
Grafton	Monongahela					2.05			.23					.08									.32											2.68
Lost Creek	do				.03	1.80			.06				T.															T.						1.89
Mannington	do				.26	.69			.15				.10	.40										.04				.26	.14					2.04
Morgantown	do				.11	1.08		T.	.21					.17										.17				.43		.73				2.90
Moundsville	Ohio				T.	.73		.12	.27					.46									T.	T.				.37	.35	.10	T.			2.40
New Cumberland	do					1.05	.30	.15	T.			.25	1.60	T.									.05						.25	.10				3.75
New Martinsville	do					.90			.35				.45															.48						2.18
Osceola	Monongahela					.15	1.35			.10																								1.60
Parkersburg ***	Ohio				.07	.93			.39				.05	T.									T.					T.	.07					1.51
Parsons	Monongahela					.35			.10					.02	.03													.25		.30				1.05
Philippi	do				.04	1.45	.01		.19					.05									T.	.05				T.	T.	.02	.09			1.90
Pickens	do				*	*	1.81	.19	.18				.07	.20	.10																				2.55
Rowlesburg	do	.02				.74	.70		.14					.06	.04									T.					.02					1.72
Saint Marys	Ohio					.80	.24		.30					.25															.04					1.63
Smithfield	Fishing Creek					.21	.13	.22	.15		.13		1.17											.42					.32	.17					2.92
Terra Alta	Monongahela																																	
Wellsburg	Ohio					.90	.08		.16			.03	.40										.04					T.	.28					1.89
Weston	Monongahela					.90	.32	.22	.22					.16								.08												1.90
Wheeling	Ohio					.44	.38		.15	.05			.05	.40										.12					.50	.01	.05			2.15
Southern Section.																																	
Bancroft	Great Kanawha					1.48	.42	.82	.27	.20				.26																					3.45
Beckley	do				.20	.63	.92	.63																											2.38
Bluefield	do					.30				.20																						.20			0.70
Charleston	do					.66	.85	.10	.14	.10				.42	T.																					2.27
Cuba	Sand Creek				.04	1.56	.07		.50	.05		T.	.60										.12	T.											2.94
Doane	Big Sandy				.97	1.00							1.00																			.04			3.01
Elkhorn	do				.21	.30	.16			.31	.10																					.02			1.10
Green Sulphur Spgs.	Great Kanawha				.13	.45	.37	.04	.20	.04																						T.			1.23
Hinton	do					.42	.52	.16	.12															.06											1.28
Holcomb	do				*	*	*	*	*	1.47			*	*	.28																					1.75
Huntington	Ohio					.88		.08	.40	.48				.16																						2.00
Lewisburg	Great Kanawha				.26	.27	.20		.13	.07														.03											0.96
Logan	Guyandotte																																	
Madison	Great Kanawha					*	.51			.50					.10		T.																			1.11
Marlinton	do				.15	.88	.09		.27	.01					.01								.01							.12					1.54
Nuttallburg	do				T.	.40	.38	.17	.30					.50	.10																T.					1.85
Point Pleasant	Ohio					1.02	.86		.26	.62				.34										.60									*			3.70
Powellton	Great Kanawha				.03	.80	.67	.23		.20				.38	.02																					2.33
Princeton	do				.75	.10	.50																									.10			1.45
Robertsburg	do					.82	.93		.27	.30				.10										.22											2.64
Ryan	do				.11	1.81	.09		.26				.33	.04									.18												2.82
Spencer	Little Kanawha					1.20	.60		.20	.20				.25																						2.45
Sutton	Great Kanawha				T.	.97	.27	T.	T.	T.				T.																						1.24
Union	do					.58	.13	.28	.05		.36			T.																						1.40
Williamson	Big Sandy					.36	.38	.04	.12	.42	.04			.18																						1.54

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

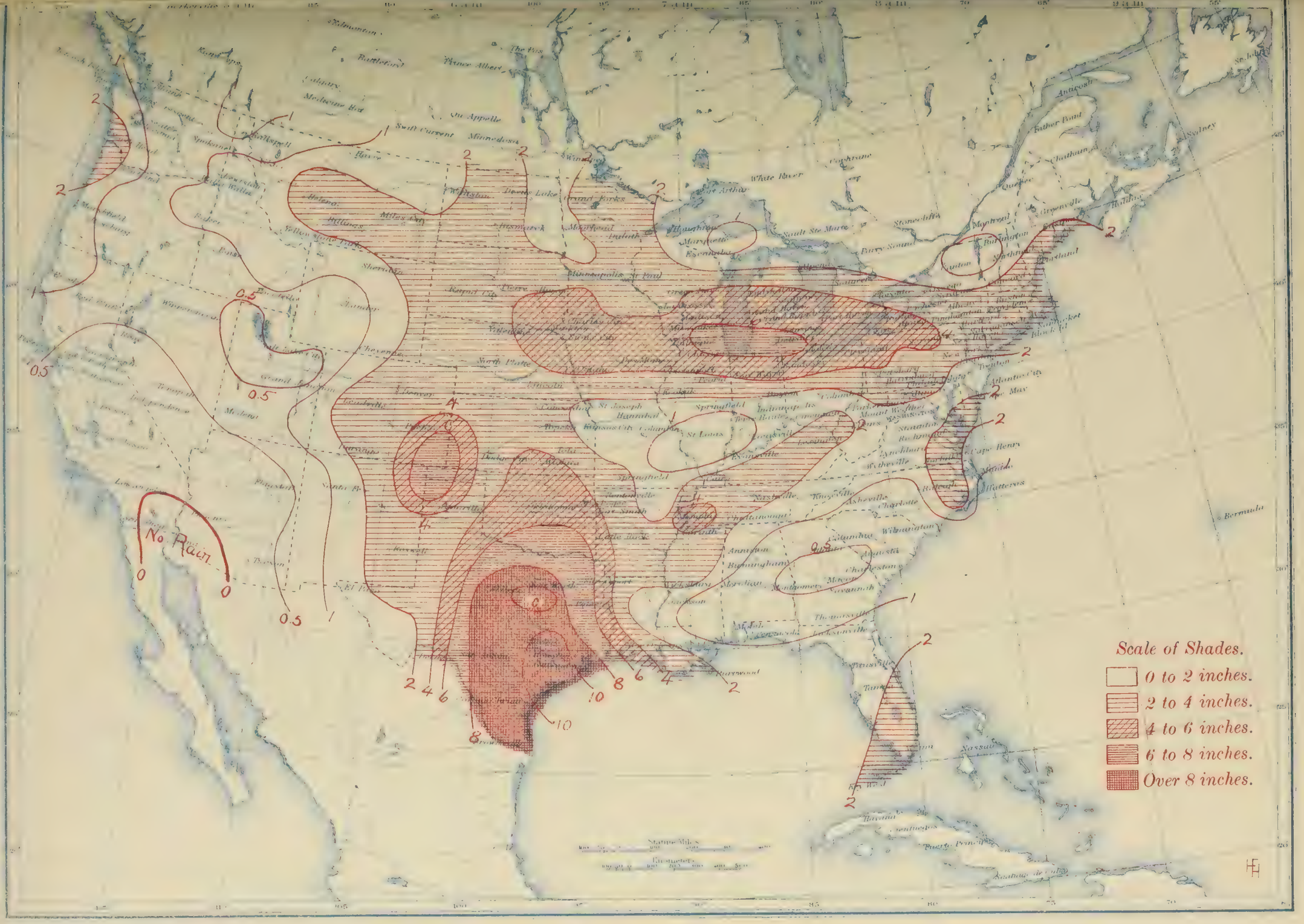
Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

Daily Temperatures for May, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	57	61	71	76	64	67	68	66	60	71	77	86	67	57	61	65	67	73	77	83	81	79	71	81	88	87	86	86	..	85	81	73.3
	Minimum	24	27	25	38	55	54	47	37	31	43	50	51	54	41	30	27	27	29	31	32	39	41	50	38	45	48	57	58	..	57	37	40.8
Burlington	Maximum	62	67	73	81	71	75	72	63	65	75	84	91	76	65	70	68	70	74	78	83	86	85	77	89	92	94	87	87	84	88	82	77.9
	Minimum	28	31	32	42	52	56	54	42	37	42	56	57	57	50	37	33	34	34	37	39	46	47	52	45	55	59	60	60	63	60	44	46.5
Lost City	Maximum	64	60	59	75	76	68	68	60	58	68	78	82	76	74	68	60	65	67	76	75	78	78	70	74	84	85	86	84	79	78	69	72.2
	Minimum	32	45	43	58	60	58	54	50	40	42	52	65	52	48	38	42	38	38	40	42	47	50	54	46	56	54	54	60	60	58	54	49.4
Martinsburg§	Maximum	66	70	72	84	70	78	75	66	68	75	87	93	61	70	70	72	75	80	83	87	90	89	80	85	91	96	97	90	88	89	86	80.1
	Minimum	38	43	39	45	54	59	59	50	43	49	58	63	55	49	48	44	41	42	44	46	52	56	59	58	56	62	66	64	62	63	53	52.3
Moorefield	Maximum	78	75	78	70	70	76	78	63	78	65	74	78	74	58	62	65	73	68	75	78	86	76	76	78	85	96	94	90	92	88	78	76.6
	Minimum	40	38	40	48	62	53	52	52	44	40	46	60	58	48	38	40	40	42	44	52	62	65	62	49	62	64	79	62	60	62	51	51.8
Romney	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Upper Tract	Maximum	62	66	75	82	67	72	74	67	61	76	87	91	78	66	67	68	71	72	76	84	80	83	75	83	83	91	93	92	92	87	88	77.7
	Minimum	28	32	32	51	58	56	52	50	40	43	55	55	56	49	34	33	32	35	36	37	44	45	50	42	55	53	55	56	59	59	59	46.5
Northern Section.																																	
Ben's Run	Maximum	60	69	77	72	72	74	72	59	65	75	82	85	62	60	68	70	74	80	82	83	84	80	84	90	84	89	89	88	92	82	80	76.9
	Minimum	35	39	39	49	59	55	48	49	45	48	53	59	51	49	41	37	40	42	46	48	49	41	48	56	48	61	63	65	66	64	51	50.1
Buckhannon	Maximum	57	68	75	77	70	73	60	70	62	75	82	88	70	65	67	66	70	70	76	81	83	82	74	81	89	88	89	90	90	87	82	76.0
	Minimum	29	32	36	47	54	54	44	48	40	41	52	54	52	44	32	44	33	39	38	40	45	48	51	52	52	54	56	60	61	54	46	46.2
Central Station	Maximum	61	65	78	77	72	71	72	64	64	77	35	90	..	58	70	68	72	79	82	85	85	82	76	85	92	91	90	90	94	84	83	78.1
	Minimum	28	33	33	46	59	49	42	48	53	43	48	..	51	45	33	32	34	40	42	42	44	47	49	42	55	61	58	61	61	62	44	45.8
Creston	Maximum	65	71	80	80	72	80	74	66	65	79	86	91	74	63	73	77	79	84	86	88	91	87	86	91	96	95	96	95	100	91	90	82.1
	Minimum	32	35	35	46	60	50	44	50	46	43	50	54	56	50	36	37	36	40	43	44	46	49	52	45	55	57	59	61	61	62	49	47.8
Elkins	Maximum	57	62	75	75	67	71	72	58	55	72	84	88	65	53	64	65	71	77	80	83	82	79	73	84	90	88	87	88	90	83	82	74.8
	Minimum	29	31	31	45	57	55	48	39	37	41	59	57	47	38	33	34	32	39	39	40	43	46	48	43	63	55	56	60	59	57	46	45.9
Fairmont§	Maximum	65	71	77	78	72	80	74	64	66	76	84	90	63	60	69	73	76	84	87	89	90	82	80	90	93	93	92	93	95	86	87	80.0
	Minimum	31	34	33	43	51	54	45	50	44	44	50	56	53	47	37	34	38	39	42	44	46	50	53	45	53	59	61	63	65	64	47	47.6
Glenville	Maximum	70	69	81	80	76	80	73	74	75	87	86	93	71	73	80	78	79	80	85	88	90	85	87	90	95	95	94	41	98	95	88	83.6
	Minimum	34	34	34	44	48	51	43	44	43	50	54	54	54	43	42	35	37	40	41	43	45	50	49	45	54	51	53	54	61	54	51	46.3
Grafton	Maximum	61	65	66	67	70	75	70	70	62	74	82	92	92	60	68	70	74	80	81	85	86	86	85	88	94	92	92	87	94	90	88	78.9
	Minimum	31	32	34	42	59	55	46	41	40	43	50	56	56	48	38	36	32	38	40	41	46	49	55	56	48	56	53	65	65	62	47	47.1
Lost Creek	Maximum	58	63	74	77	67	71	68	60	58	73	81	86	66	55	66	67	68	77	74	81	82	80	78	83	89	88	88	89	91	84	81	75.1
	Minimum	25	29	28	39	56	52	30	50	40	42	49	54	52	44	31	29	29	36	37	37	40	44	45	38	49	56	55	54	56	61	40	43.1
Mannington	Maximum	59	63	75	75	71	76	71	65	63	73	83	87	67	58	66	67	69	76	79	83	84	81	75	82	90	89	88	87	90	83	81	76.0
	Minimum	29	31	31	41	59	54	42	50	41	41	48	56	52	47	35	32	34	37	40	41	44	46	52	43	50	55	58	61	63	61	43	45.7
Morgantown	Maximum	56	69	73	74	69	73	70	61	61	73	80	86	64	68	65	65	69	77	80	82	82	79	74	84	89	89	89	87	91	84	82	75.6
	Minimum	31	35	38	57	59	56	49	44	41	50	60	61	49	45	52	36	37	46	50	51	52	54	54	49	65	71	64	64	65	67	50	51.8
New Cumberland	Maximum	59	65	74	76	71	75	68	60	70	72	76	82	50	65	66	66	71	77	80	85	86	80	74	79	90	90	87	85	93	80	82	75.3
	Minimum	30	32	33	47	46	53	44	50	37	43	58	47	44	39	36	32	36	39	43	47	49	51	50	50	62	65	68	65	61	56	42	46.9
New Martinsville	Maximum	63	69	79	75	74	77	73	67	68	77	84	88	66	63	70	70	75	82	85	88	88	82	81	86	93	92	89	93	93	89	87	79.5
	Minimum	35	36	36	46	61	54	46	49	43	46	52	60	50	48	40	36	38	42	44	46	47	50	56	47	54	59	63	65	65	66	49	49.3
Parkersburg	Maximum	59	64	77	73	72	76	71	60	67	78	84	88	57	61	67	67	71	79	81	84	86	82	74	85	92	92	90	91	96	82	83	77.1
	Minimum	38	40	43	56	58	53	50	48	47	50	57	54	48	47	40	41	44	46	51	51	53	54	57	50	61	70	68	66	67	63	55	52.5
Parsons	Maximum	58	63	77	79	70	72	70	61	57	70	83	87	79	55	65	65	70	75	80	83	82	80	72	85	89	88	87	86	88	87	80	75.2
	Minimum	30	29	29	40	45	56	48	43	34	37	49	56	52	42	35	31	30	34	36	36	41	44	49	39	50	51	53	58	56	56	45	43.0
Philippi	Maximum	60	65	79	78	69	74	71	61	60	81	74	89	74	59	68	65	73	81	82	85	85	84	76	86	93	92	91	90	94	86	85	77.7
	Minimum	29	31	29	42	59	63	44	44	38	41	31	55	55	46	32	33	32	35	..	..	..	..	..	..	..	..	..	60	63	62	45	44.0
Pickens	Maximum	65	60	77	70	62	63	66	68	51	72	80	88	62	50	60	64	69	74	80	80	81	..	78	84	86	87	87	86	87	82	81	73.3
	Minimum	29	30	35	52	56	54	45	43	36	41	54	55	47	39	33	35	34	43	43	44	47	..	57	56	60	56	58	59	60	58	46	46.9
Wellsburg	Maximum	57	60	72	72	69	72	66	60	65	71	76	81	62	60	62	63	67	74	78	80	81	77	70	78	86	87	85	84	88	75	78	72.8
	Minimum	32	34	39	53	59	54	48	49	38	49	55	57	44	41	51	36	40	46	58	52	55	56	52	53	59	66	69	66	64	65	48	51.0
Weston§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Wheeling§	Maximum	66	71	78	76	75	80	76	64	71	76	84	88	55	68	71	74	77	82	86	90	90	82	86	93	95	92	92	95	87	87	80.3
	Minimum	34	34	36	42	61	55	46	51	40	44	54	60	48	44	40	34	38	41	45	45	48	51	53	50	52	59	62	66	66	65	48	48.8
Southern Section.																																	
Beckley	Maximum	66	65	65	78	78	73	70	70	68	78	80	83	74	54	68	65	71	75	78	80	81	80	78	63	86	85	87	85	88	87	87	75.7
	Minimum	31	35	34	37	37	47	49	42	39	54	51	53	45	41	32	34	56	41	40	42	41	41	47	34	50	54	55	59	53	54	54	44.6
Bluefield	Maximum	67	67	..	76	67	72	68	65	52	..	82	84	83	57	65	67	..	72	75	81	81	79	78	..	..	88	86	89	89	85	..	75.0
	Minimum	35	37	..	41	59	57	52	50	39	..	41	67	55	47	33	36	..	39	50	45	47	49	62	..	..	51	57	58	60	60	..	49.1
Charleston	Maximum	64	67	78	75	72	74	72	72	62	79	88	89	88	60	70	70	77	80	82	86	86	85	81	90	92	93	90	93	96	92	87	80.3
	Minimum	40	43	44	52	62	55	55	54	48	49	56	59	55	50	45	43	38	43	46	47	49	51	57	51	58	61	61	62	68	64	55	52.3
Elkhorn	Maximum	67	72	71	69	66	72	69	68	60	75	81	80	78	67	76	79	82	80	72	76	76	74	75	84	89	86	86	87	88	86	80	76.5
	Minimum	39	49	51	54	52	52	47	42	38	36	50	52	53	45	50	53	59	42	38	39	41	43	56	45	52	48	50	53	54	54	53	48.1
Green Sulphur Spgs.	Maximum	67	68	79	74	69	73	78	64	57	78	86	87	77	57	69	69	74	75	79	84	83	80	77	87	91	91	89	90	92	86	85	77.9
	Minimum	30	33	34	46	52	55	45	45	44	38	50	49	55	47	35	33	32	40	36	38	42	44	55	47	55	47	52	54	55	55	55	45.1
Hinton§	Maximum	70	70	81	76	72	77	70	65	59	80	88	91	75	58	70	74	78	78	80	85	85	85	82	88	94	94	93	92	95	90	88	80.1
	Minimum	34	38	39	45	54	55	49	50	46	43	44	54	57	49	41	39	38	43	41	42	46	49	47	51	54	50	57	58	60	64	62	48.4
Holcomb§	Maximum	62	68	78	72	70	73	71	59	77	74	84	88	83	51	66	70	72	77	81	83	81	80	81	87	91	90	88	90	92	86	83	77.7
	Minimum	30	30	32	40	56	53	42	48	40	38	40	47	50	43	35	33	30	37	37	38	40	42	51	41	53	48	51	51	53	55	50	43.0
Huntington§	Maximum	64	69	78	71	74	81	73	54	70	81	88	90	63	62	64	72	76	82	83	83	88	82	81	91	92	93	92	96	97	91	89	79.7
	Minimum	37	41	41	52	61	51	53	50	46	46	55	63	55	41	43	40	40	44	48	50	48	50	59	51	60	62	63	63	71	65	58	51.8
Lewisburg	Maximum	63	66	75	76	69	71	69	62	56	73	81	84	77	58	64	67	71	73	75	81	82	77	75	83	88	92	86	87	89	86	82	75.4
	Minimum	29	33	36	46	57	55	56	48	42	35	50	52	56	47	32	34	35	40	38	38	43	43	55	45	52	49	51	53	54	56	53	45.6
Madison§	Maximum	67	..	..	..	73	..	..	..	80	63	90	92	64	50	70	72	76	80	83	..	93	94	92	92	90	93	94	95	98	90	..	82.2
	Minimum	..	36	..	..	..	57	..	..	..	46	33	33	56	49	42	41	37	36	42	45	..	47	55	52	55	54	59	61	62	62	62	48.8
Marlinton	Maximum	61	62	69	70	70	66	63	58	53	72	77	81	67	54	61	63	68	68	72	79	77	74	72	79	82	84	82	84	86	..	..	70.8
	Minimum	23	25	26	28	28	50	42	44	31	32	42	44	49	44	30	28	26	32	30	30	35	37	46	39	42	46	45	51	49	..	..	37.0
Point Pleasant	Maximum	64	70	79	75	75	81	73	64	70	81	87	91	66	65	74	72	77	82	85	88	90	85	80	88	94	94	94	95	98	91	89	81.2
	Minimum	32	35	37	52	59	51	49	46	43	46	52	58	51	47	39	36	38	41	45	45	48	51	52	47	57	60	62	62	63	63	45	48.9
Powellton	Maximum	67	69	87	86	76	75	70	..	66	80	90	93	85	54	69	70	77	81	82	85	86	84	88	91	95	93	97	94	97	92	91	81.8
	Minimum	33	36	37	49	56	55	50	..	40	42	53	51	54	42	36	36	34	40	43	45	48	50	54	48	58	54	52	58	60	60	57	47.7
Robertsburg§	Maximum	60	66	79	74	73	77	74	55	69	69	87	89	57	64	69	69	75	83	86	87	87	82	77	91	93	92	92	95	98	87	85	78.7
	Minimum	32	37	36	38	58	51	48	50	45	45	53	54	53	48	38	35	35	40	44	44	46	49	52	47	57	50	57	50	62	62	50	47.1
Ryan	Maximum	62	70	78	75	75	76	70	59	70	77	85	83	73	68	69	76	78	78	82	81	83	83	76	85	90	90	90	92	93	88	86	78.7
	Minimum	28	31	30	55	59	48	45	50	43	40	50	50	52	46	32	30	30	37	39	40	43	43	49	51	53	55	55	57	58	50	46	45.6
Spencer§	Maximum	60	77	80	72	74	77	72	60	78	78	86	88	60	51	70	70	74	80	83	86	87	85	79	87	89	88	92	93	95	89	86	78.9
	Minimum	28	30	34	54	60	64	44	49	46	41	59	52	55	47	36	30	34	38	41	42	44	46	49	43	57	56	56	58	61	45	46	46.1
Union§	Maximum	65	70	68	76	73	70	69	72	68	75	83	85	75	58	66	71	68	78	79	80	83	79	80	83	88	89	88	88	93	85	84	77.
	Minimum	30	33	36	40	58	55	47	48	46	36	40	51	45	48	32	33	37	34	39	40	41	44	45	48	46	48	50	52	55	55	52	44.3
Williamson§	Maximum	67	68	79	68	69	75	69	55	62	76	86	89	61	57	68	68	74	79	79	80	82	81	80	87	90	89	89	90	95	88	93	77.
	Minimum	37	37	38	36	47	54	53	50	43	45	53	55	56	48	41	42	38	39	45	46	49	49	52	53	60	56	57	62	62	62	63	49.

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain.
Statute Miles
Kilometers

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JUNE, 1914

BY

HENRY C. HOWE

SECTION DIRECTOR

CLEVELAND, OHIO
WEATHER BUREAU OFFICE
JULY 22, 1914

Departure of the Mean Temperature from the Normal, June, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXII. PARKERSBURG, W. VA., JUNE, 1914. No. 6.

GENERAL SUMMARY.

June was characterized by light and unfavorably distributed rainfall, high temperatures, and an abundance of sunshine. It was the warmest June for the past 15 years. Only one June of record was drier. In 1895 the June average was 2.92 inches. In only three years of record, 1897, 1900, and 1913, was more sunshine received in June. The conditions were droughty until the beginning of the last decade, causing much damage to vegetation. In a few of the more elevated sections much damage was caused by the low temperatures on the 17th.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.04 inches and 30.02 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.24 inches on the 30th, and 29.77 inches on the 27th. Elkins, 30.26 inches on the 3d, and 29.71 inches on the 28th. Low pressure areas of moderate energy crossed the State on the 4th, 22-23d, and 27-28th.

TEMPERATURE.

The monthly mean temperature for the State, 46 stations reporting, was 72.0°. The mean departure from the normal for 40 stations having ten or more years of record was plus 3.0°. The month opened with the temperatures slightly below the normal. The temperatures were somewhat above the normal from the 4th to the 6th and much above from the 6th to the 11th. At the close of the first decade the maximum temperatures ranged generally from 90 to 100°, the highest readings for the month occurring at a number of the stations. Cool weather prevailed from the 12th to the 21st, On the morning of the 17th the readings ranged generally from 35° to 50°, but a temperature of 30° was recorded at Bayard, Grant county. Considerable frost damage resulted. High temperatures again prevailed from the 21st to the 28th. The maximum readings during that period were near the June record in nearly all sections. Abnormally cool weather prevailed on the last two days.

HUMIDITY.

The average of the humidity readings at 8 a. m. and 8 p. m. at Parkersburg and Elkins, with departures from the normals, were as follows: Parkersburg, 8 a. m., 71 per cent; 8 p. m., 61 per cent. The June averages for the same hours for the past 25 years are 78 and 68 per cent, respectively. Elkins, 8 a. m., 76 per cent; 8 p. m., 68 per cent. The June averages for Elkins for 8 a. m. and 8 p. m. for the past 15 years are 85 and 75 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 57 stations reporting, was 3.00 inches. The mean departure from the normal for 48 stations having ten or more years of record was minus 1.71 inches. The rainfall was lightest over the southern counties and the Little Kanawha basin. The amounts were heaviest over the Monongahela basin. Moderately heavy rain was general on the 4-5th. While there were scattered showers from the 10th to 12th and on the 18th and 19th, no rain of much consequence fell from the 5th until the last decade. Moderate showers occurred nearly every day in many sections from the 22d to the 27th.

WIND.

The average velocity of the wind at Parkersburg was 5.1 miles per hour, or 0.6 of a mile above the June average for the past 25 years. The average at Elkins was 3.5 miles per hour, or 0.3 of a mile above the June average for the past 15 years. The highest velocity at Parkersburg was 57 miles per hour from the northwest on the 22d. This is the highest velocity of record for Parkersburg. The highest velocity at Elkins was 29 miles per hour from the northwest on the 22d.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 66 per cent of the possible amount, or 10 per cent above the June average for 17 years. The average at Elkins was 70 per cent, or 18 per cent above the June average for 15 years.

MISCELLANEOUS PHENOMENA.

Frost, killing: Bayard and Davis, 17th.

Frost, light: Elkins, 3d and 17th; Buckhannon, Burlington, Lost City, Mannington, Osceola, Parsons, Philippi, and Pickens, 17th.

Halo, lunar: Bayard, 1st and 7th.

Halo, solar: Charleston, Madison, Nuttallburg and Ryan, 16th; Wellsburg, 3d.

Hail: Davis, 28th; Parkersburg and Princeton 11th; Sutton, 19th; Upper Tract, 26th.

Haze, light: Bayard, 2d, 3d, 13th, 14th, 15th, 16th, and 19th.

Thunderstorms (Dates and number of stations reporting): 1st, 3; 3d, 1; 4th, 13; 5th, 6; 6th, 1; 7th, 3; 8th, 1; 9th, 2; 10th, 5; 11th, 7; 12th, 6; 15th, 1; 18th, 1; 19th, 9; 20th, 1; 21st, 4; 22d, 9; 23d, 9; 24th, 5; 25th, 9; 26th, 9; 27th, 5; 28th, 4.

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.			Precipitation.
	Mean.	Highest.	Lowest.	
1891	71.2	..	..	5.02
1892	74.1	99	41	3.90
1893	70.2	99	40	3.81
1894	70.4	103	32	3.27
1895	72.1	102	38	2.92
1896	69.8	95	30	5.35
1897	69.3	96	35	4.31
1898	70.9	99	41	3.21
1899	72.0	98	35	4.99
1900	71.2	98	41	5.30
1901	70.7	104	32	5.67
1902	68.0	100	33	5.19
1903	65.1	93	34	4.80
1904	69.5	97	36	4.20
1905	70.6	100	34	4.38
1906	70.9	101	38	5.25
1907	65.3	97	33	6.00
1908	69.2	98	36	3.12
1909	71.1	101	35	5.73
1910	66.6	96	32	5.67
1911	70.7	101	40	4.44
1912	67.3	95	29	4.27
1913	69.5	99	29	3.44
1914	72.0	104	30	3.00
Entire period	69.9	104	29	4.47

Climatological Data for June, 1914.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	67.0	+3.6	90	11†	30	17	50	4.96	−0.11	1.12	0	11	16	10	4	w.	Solomon Clark
Burlington	Mineral	875	20	70.8	+2.4	98	25	36	17	44	1.92	−2.24	0.56	0	5	12	18	0	nw.	J. W. Vandiver
Franklin	Pendleton	641	8	66.5	.....	91	21	37	17	46	2.10	.....	0.70	0	7	10	13	7	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	4.03	+0.38	1.30	0	8	.....	.....	.....	e.	S. W. Lightner
Lost City	Hardy	.....	8	68.2	.....	88	11†	39	17	42	3.41	.....	1.23	0	8	2	28	0	w.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	73.8	+3.1	99	10†	46	17	42	3.34	−0.84	1.20	0	8	21	7	2	ne.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	72.7	+3.6	98	10	47	20	40	2.30	−2.04	1.20	0	5	10	19	1	sw.	John C. Fisher
Romney	Hamshire	824	19	.....	.....	98 [k]	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John C. Linthicum
Upper Tract	Pendleton	1,230	15	71.2	+3.2	97	21	36	17	45	2.90	−1.65	0.82	0	7	2	26	2	w.	J. M. Mallow
Averages and	Extremes	.....	.....	70.0	+3.2	99	10†	30	17	50	3.12	−0.81	1.30	0	7	11	17	2	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	72.4	+2.1	95	24	45	17	36	2.95	−1.57	1.14	0	7	22	8	0	.....	J. D. Riggs
Brandonville *	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	4.33	.....	1.50	0	8	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	70.5	+1.6	92	9†	38	17	42	3.77	−1.19	0.85	0	8	20	7	3	.....	H. A. Darnall
Cairo	Ritchie	674	12	73.0	+2.6	98	10†	40	17	40	3.22	0.90	0.90	0	9	1	20	9	sw.	Van A. Zevely
Central Station	Doddridge	950	12	.....	.....	96	10†	37	17	....	3.04	−1.13	.....	0	.....	.....	.....	.....	.....	G. W. Sherwood
Cheat Bridge *	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	6.60	.....	1.70	0	9	.....	.....	.....	.....	Franz A. Degler
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	5.98	.....	1.95	0	10	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	74.6	+4.1	102	24	41	17	47	1.48	−2.90	0.63	0	6	10	14	6	sw.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	4.42	.....	1.77	0	10	19	4	7	sw.	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	1.93	.....	0.96	0	5	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	69.5	+1.0	95	10	37	17	44	4.23	−0.81	1.24	0	11	6	14	10	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	72.6	+2.1	99	25	40	17	47	3.57	−1.14	1.61	0	10	26	0	4	w.	F. P. Hall
Glenville	Gilmer	738	25	73.3	+2.7	101	21	40	17	46	1.37	−3.18	0.95	0	2	16	11	3	w.	Joe N. Craddock
Grafton	Taylor	1,000	22	72.4	+3.3	98	10	39	17	48	4.78	+0.17	1.38	0	9	17	7	6	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	68.9	+1.1	93	10†	34	17	49	2.80	−1.30	0.86	0	9	22	5	3	w.	Allen Smith
Mannington	Marion	974	12	69.8	+1.4	93	9†	37	17	43	4.22	+0.24	1.61	0	12	19	7	4	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	71.2[a]	+2.2	94	9	41 [a]	17	40[a]	4.07	−0.56	0.94	0	7	6	23	1	.....	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	73.0	+3.3	99	24	39	17	45	4.27	+0.80	1.15	0	12	18	4	8	w.	M. L. Brown
New Cumberland	Hancock	987	15	69.7	+1.5	95	9†	36	17	39	3.45	−0.18	1.40	0	6	12	10	8	s.	Frank S. Evans
New Martinsville	Wetzel	634	21	73.3	+1.7	97	9	43	17	40	3.81	0.07	1.20	0	9	14	14	2	s.	Wm. Ankrom
Osceola	Randolph	3,600	0	.....	.....	.....	.....	.....	.....	.....	5.25	.....	1.55	0	8	7	12	11	w.	A. T. Dohmer
Parkersburg	Wood	638	26	73.4	+1.9	97	25	48	20	38	2.16	2.49	0.70	0	8	15	12	3	n.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	68.4	+2.1	91	23	34	17	47	3.89	−1.93	1.70	0	7	16	13	1	.....	J. W. Swisher
Philippi	Barbour	1,149	22	73.0	+4.7	97	21†	33	17	51	2.88	−1.79	1.45	0	11	16	12	2	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	67.5	+2.2	89	11	40	17	38	2.96	−3.38	0.94	0	9	22	6	2	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	4.62	−0.34	2.40	0	11	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	3.33	.....	1.35	0	9	.....	.....	.....	.....	J. O. Goodman
Smithfield *	Wetzel	835	10	70.1	.....	98	9†	37	17	50	4.49	.....	1.36	0	10	13	13	4	ne.	G. M. Whisler
Terra Alta	Preston	2,612	14	67.2	+0.7	88	9	36	17	40	5.80	−1.49	2.00	0	7	14	13	3	.....	H. N. Cuppett
Wellsburg	Brooke	1,225	20	69.5	+2.0	71	25	42	17	33	4.26	−0.21	2.00	0	6	12	16	2	w.	C. P. Waugh
Weston	Lewis	1,026	26	73.8	+2.8	94	8†	54	6†	36	2.56	−2.13	1.16	0	5	18	10	2	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	71.8	.....	99	9	43	17	42	4.33	+0.45	1.77	0	10	18	4	8	s.	Miss M. B. Forsyth
Averages and	Extremes	.....	.....	71.3	+2.2	102	24	33	17	51	3.63	−1.13	2.40	0	8	15	10	5	w.	
Southern Section.																				
Bancroft	Putnam	574	11	.....	.....	.....	.....	48	17	....	2.52	−2.20	0.72	0	8	27	0	3	ne.	R. E. Dent
Beckley *	Raleigh	2,440	15	71.2	+4.0	91	11†	40	16	48	2.37	−1.79	1.35	0	4	21	4	5	w.	John A. Ewart
Bluefield	Mercer	2,558	20	73.8[c]	+5.0	95 [d]	27	.....	.....	33	0.62	−4.76	0.26	0	6	10[c]	14[c]	3[c]	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	76.0	+3.6	98	22†	47	17	39	2.76	−2.60	1.05	0	9	18	9	3	w.	R. C. Hewes
Cuba *	Jackson	650	14	72.6	+3.8	99	26	44	30	43	1.54	−2.47	0.60	0	8	7	23	0	w.	C. T. Perry
Doane	Wayne	717	7	.....	.....	.....	.....	.....	.....	.....	3.00	.....	1.42	0	9	19	6	5	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	73.0	+4.5	95	26	50	17	34	3.15	−2.24	1.13	0	8	10	19	1	w.	J. J. Lincoln
Green Sulphur Spgs.	Summers	1,600	19	72.6	+4.1	96	25	41	17	40	2.44	−1.79	0.93	0	10	12	15	3	w.	Arthur George
Hinton	do	1,450	25	75.4	+4.8	98	23†	47	17	38	1.75	−2.50	0.96	0	9	21	1	8	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	70.4	.....	95	25	36	17	45	1.05	.....	0.28	0	7	15	5	10	.....	R. E. Ferguson
Huntington	Cabell	538	19	76.5	+4.0	98	10†	51	3†	39	2.04	−2.26	0.62	0	6	25	1	4	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	71.4	+4.0	96	25†	43	17	38	1.44	−2.75	0.74	0	7	28	2	0	nw.	Geo. T. Argabrite
Madison	Boone	704	9	75.4[b]	.....	100 [b]	23	40 [a]	17	47[c]	2.38	−1.36	1.02	0	9	17[a]	10[a]	2[a]	.....	S. E. Bradley
Marlinton *	Pocahontas	2,131	18	65.8[g]	.....	89 [g]	9†	32 [g]	17	40[b]	2.37	−2.43	.....	0	....	15[g]	8[g]	0[g]	.....	C. J. McCarty
Nuttallburg	Fayette	2,252	22	.....	.....	.....	.....	.....	.....	.....	1.70	−2.71	1.35	0	4	.....	.....	.....	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	75.4	+2.5	104	24	42	17	47	2.32	−2.22	1.10	0	9	17	5	8	ne.	W. D. Holmes
Powellton	Fayette	933	17	75.8[a]	+5.3	102 [a]	25	43 [a]	17	44[a]	1.75	−3.12	0.94	0	6	8	20	2	.....	Morris Hansford
Princeton	Mercer	2,395	14	67.2	+2.4	87	28	46	17	28	3.25	−4.21	0.75	0	7	20	6	4	w.	H. Scott
Robertsburg	Putnam	574	14	74.6	+3.4	100	26	44	3	45	1.23	−2.76	0.40	0	6	24	0	6	n.	E. P. Turley
Ryan	Roane	700	11	72.8	+3.9	97	24	39	17	44	1.44	−3.06	0.73	0	7	14	15	1	.....	Wm. E. Ryan
Spencer *	do	784	16	71.6	.....	98	25	42	3	45	1.78	−2.66	0.65	0	6	12	15	3	.....	A. M. McKown
Sutton	Braxton	839	11	74.8[c]	.....	99 [c]	9†	39 [c]	17	49[f]	4.00	−1.93	1.23	0	7	12	15	3	.....	Ben Gillespie
Union	Monroe	2,250	10	71.5	+5.1	95	25	48	1†	37	0.97	−3.30	0.41	0	6	.....	.....	.....	.....	Shelton Clark
Williamson	Mingo	660	13	74.5	+2.4	96	27	50	3†	40	0.80	−4.33	0.20	0	8	19	9	2	w.	J. F. Keyser
Averages and	Extremes	.....	.....	73.6	+3.9	104	24	36	17	49	2.03	−2.78	1.42	0	7	18	8	4	w.	
State Averages and	Extremes	.....	.....	72.0	+3.0	104	24	30	17	51	3.00	−1.71	2.40	0	8	15	11	4	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for June, 1914.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac				.50	1.12			T.	.07	.05		T.		T.					.24			.45	1.08		.40	.70	.05	.30				4.96
Burlington	do				.40														T.	.10			.38	T.		.48		.56					1.92
Harpers Ferry	do				T.	.59									.21					T.	.32			.60	.21	.05	1.25		.80			4.03
Lost City	do	.03			.70																.30		1.23	.53		.37	.10	.15					3.41
Martinsburg	do				.45										T.					.55		.05	.72	.20		.17		.75	.45				3.34
Moorefield	do		T.		.25	.25									T.					T.			1.20	.45		T.	.15	T.					2.30
Romney	do																					.75	.80		.14		.22						§
Upper Tract	do	T.			.31		.43			T.	.50									.14			.82	T.		.20	.50	T.					2.90
Northern Section.																																	
Bens Run	Ohio				1.14						.10									.48			.29	.16			.28	.50					2.95
Brandonville	Monongahela					T.	1.50						.07		.09						.85			.20			.34	.91	.37				4.33
Buckhannon	do				.30	.85							.20						T.	.67			.80	.50			.15	.30					3.77
Cairo	Little Kanawha				.46	.35					.52	.02	.45										.02	.42				.90	.08				3.22
Central Station	Middle Is. Creek	T.			.63	.49					T.		.30									.27						1.35				3.04
Cheat Bridge	Monongahela	.20			1.60								.80						.02	.20			1.70	.33	1.10			.65					6.60
Cortland	do					1.95	.13													.41	.70			.86	.41	.30	.30	.50	.42				5.98
Creston	Little Kanawha		T.		.20	.43						T.			T.									.20		.10		.05	.50				1.48
Davis	Monongahela				.08	1.77						T.	.03							.07	.51		1.19	.02	.21	T.	.07	.47					4.42
Elizabeth	Little Kanawha					.75														.05				.08		.09		.96					1.93
Elkins***	Monongahela	.10			1.18	.04			T.		T.	.14	T.		T.				.13	.13			.77	.27	.01	1.24	T.	.22					4.23
Fairmont	do		.12		.02	1.59						.06	.04							T.	.25			.94	.27			.18	.10				3.57
Glenville	Little Kanawha					.95																								.42			1.37
Grafton	Monongahela	.08			.60	1.38							.07								.50			.48	.30		.47		.90				4.78
Lost Creek	do				.24	.50							.14						T.	.41			.38	.86		T.	.10	.09	.08				2.80
Mannington	do	.35			.99	.62					.22		.10							.46			.29	.52	.05	.03	T.	.56	.03				4.22
Morgantown	do				.94	.43								.70						.53			.37	.74			.36						4.07
Moundsville	Ohio	T.			.66	1.15			.13				.48		.05					.15			T.	.64	.05	.05	.40	.42	.09				4.27
New Cumberland	do	T.			1.40	.05		T.					T.							.25			.25					.30	1.20	T.			3.45
New Martinsville	do	.20			1.20						.28	.48								.50			.25	.32		.08		.50					3.81
Osceola	Monongahela		.20			1.55							.40							.10	.90			.90	.80	.40							5.25
Parzersburg ***	Ohio	T.			.70			T.			T.	.36			T.				.01	.01			.46			.01	.10	.51					2.16
Parsons	Monongahela				1.70														.04	.50			.40		.60	.30		.35					3.89
Philippi	do	.08	.02		.47	.98							.24						T.	.16			.04	.21			.47		.14	.07			2.88
Pickens	do	.10			.94						.32	.10			T.				.40				.27	.26			.36		.21				2.96
Rowlesburg	do		.06			2.40					.02	.04								.02	.26			.98	.66	.04		.08	.06				4.62
Saint Marys	Ohio				.10	1.25			.05		.25	.11												.52	.53		.12		.40				3.33
Smithfield	Fishing Creek		.18		.31	1.36														T.	.76			.42	.39	.14	.26	.46	.21				4.49
Terra Alta	Monongahela			2.00					.20											.85			2.00			.20	.20		.35				5.80
Wellsburg	Ohio	T.			1.58	.03														.24				.21				.20	2.00				4.26
Weston	Monongahela		.02		T.	1.16							T.							T.				.86			.10	.42					2.56
Wheeling	Ohio		T.		.33	1.77							.03		.01						.20		T.	.32	T.	.28	.12	.25	1.02				4.33
Southern Section.																																	
Bancroft	Great Kanawha		.32			.40			.70						.05						.02					.23	.72	.08					2.52
Beckley	do					1.35															.48					.16		.38					2.37
Bluefield	do				.01								.10	.05		.15					.26							.05					0.62
Charleston	do		.36			1.05			.12						.40				.02	T.					.08	.02	.62	.09					2.76
Cuba	Sand Creek	.09			.12	.47		T.			T.		.02		.03	T.				T.	T.		.20	.01			.60						1.54
Doune	Big Sandy	.05				1.42	.04						.10		.10				.22	.07					.30	.70							3.00
Elkhorn	do				.23	.57							1.13			.14				.22	.35					.01	.50						3.15
Green Sulphur Spgs.	Great Kanawha					.93	.24	.02												.01	.08	.44		.26	.02		.13	.31					2.44
Hinton	do					.96		.24							.04					.20	.02	.01				.08	.02	.18					1.75
Holcomb	do	T.			.20										.15					.28			.18	.08		*	.16						1.05
Huntington	Ohio		.02		.06	.56																				.40	.62	.38					2.04
Lewisburg	Great Kanawha	T.				.74	.11		T.				.08	T.	.08					.04		T.	.18					.21					1.44
Logan	Guyandotte							.04					T.			T.		T.	.30	.15	.10					.90	.22						§
Madison	Great Kanawha		.04			1.02			.26						.02				.14	.22						.21	.15	.32					2.38
Marlinton	do												1.27							.12	.01		.08	.28	.03	.58							2.37
Nuttallburg	do	T.				1.35						T.								*			.15			.20							1.70
Point Pleasant	Ohio		.60			.38			T.			.01			.04											.01	.02	.06	1.10	.10			2.32
Powellton	Great Kanawha				.06	.94									.05									T.	.35		.30	.05					1.75
Princeton	do				.50	.10	.25	.25				.75	.65													.75							3.25
Robertsburg	do		.40			.12									.08												.15	.28	.20				1.23
Ryan	do	.32			.01	.01		.27							.01	T.				T.			T.	T.		.09	T.	.73					1.44
Spencer	Little Kanawha		.20			.20										.13							.65				.10	.50				1.78
Sutton	Great Kanawha		T.		T.	.42														T.	.87		.32	.60		.21	1.23		.35				4.00
Union	do					.41		.12								.07					.10			T.			.07		.20				0.97
Williamson	Big Sandy		.06			.10	.06							.06					.20	T.	.18			.04		.10							0.80

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch. § Incomplete.

Daily Temperatures for June, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	83	73	82	80	74	76	85	87	88	89	90	87	78	74	75	70	78	76	79	80	90	85	85	90	89	87	85	86	86	75	..	82.1
	Minimum	42	45	32	62	54	44	50	59	58	57	61	60	43	50	46	41	30	38	51	48	49	61	63	56	65	56	67	65	58	42	..	51.8
Burlington	Maximum	80	77	82	88	75	78	89	94	84	95	94	93	85	74	83	75	79	81	83	84	94	85	93	96	98	85	91	93	77	78	..	85.4
	Minimum	47	53	38	60	56	45	52	63	65	62	67	67	51	57	50	50	36	41	48	50	51	66	67	61	67	64	67	69	65	52	..	56.2
Lost City	Maximum	80	70	76	82	70	75	82	86	82	87	88	86	80	70	76	69	74	74	79	76	87	81	84	87	88	82	82	88	84	72	..	80.0
	Minimum	46	54	40	60	56	46	50	44	60	62	65	64	66	68	53	54	39	48	57	52	52	67	64	61	67	62	62	67	52	54	..	56.4
Martinsburg§	Maximum	83	81	87	88	79	82	93	98	85	99	96	96	89	69	86	78	82	86	86	80	94	83	92	99	99	92	92	92	82	79	..	87.5
	Minimum	54	56	47	51	58	49	51	65	69	61	66	73	62	65	57	56	46	50	57	52	54	64	67	68	70	70	70	70	69	58	..	60.2
Moorefield	Maximum	78	76	72	78	80	82	86	94	96	98	94	90	74	66	82	86	84	88	85	80	94	90	88	95	92	90	91	93	78	80	..	85.3
	Minimum	64	60	50	62	60	58	56	62	64	68	72	68	56	58	56	52	48	52	50	47	54	58	62	70	74	66	68	67	62	58	..	60.1
Romney	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Upper Tract	Maximum	86	78	82	87	84	79	89	91	89	86	94	90	87	80	81	76	81	79	85	85	97	83	89	92	94	92	90	83	87	81	..	86.2
	Minimum	45	49	38	64	63	48	53	60	62	63	63	64	53	56	53	51	36	45	54	45	55	65	69	60	67	60	67	68	67	45	..	56.3
Northern Section.																																	
Bens Run	Maximum	72	76	84	85	78	82	89	93	94	93	90	85	82	84	80	73	80	78	84	80	91	87	90	95	94	89	86	86	71	77	..	84.2
	Minimum	53	50	49	66	61	56	62	66	69	67	69	67	59	63	57	51	45	58	58	47	55	65	68	67	70	66	67	71	61	51	..	60.5
Buckhannon	Maximum	81	75	85	85	81	83	87	89	92	92	91	89	78	77	79	70	80	80	85	78	92	90	90	91	92	91	86	89	80	76	..	84.5
	Minimum	47	49	41	63	56	55	57	62	64	65	65	64	52	56	51	50	38	50	50	48	60	69	65	50	69	60	65	70	59	45	..	56.5
Central Station	Maximum	76	77	87	88	78	85	89	91	94	96	94	87	81	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	47	44	40	67	61	53	58	62	64	61	64	63	49	59	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Creston	Maximum	83	84	89	90	83	87	94	98	99	101	100	95	89	90	87	80	86	81	90	88	100	100	99	102	99	100	89	95	78	84	..	91.3
	Minimum	48	49	44	61	63	55	59	63	65	64	66	66	52	60	54	48	41	54	52	47	53	69	61	66	70	66	68	71	53	46	..	57.8
Elkins	Maximum	79	75	83	84	76	81	85	89	93	95	91	86	80	76	77	70	80	76	81	82	91	84	87	90	92	89	84	89	68	75	..	82.9
	Minimum	44	47	39	61	56	52	58	62	63	64	65	64	52	56	56	45	37	52	53	47	55	63	65	61	67	62	66	68	58	44	..	56.1
Fairmont§	Maximum	75	82	91	86	78	88	93	96	98	98	96	89	85	86	82	78	85	85	85	82	95	88	93	98	99	97	87	92	68	84	..	88.0
	Minimum	49	47	44	49	58	53	56	65	67	66	68	66	52	56	56	51	40	48	54	46	52	65	68	65	71	65	66	69	61	46	..	57.3
Glenville	Maximum	80	80	81	84	90	94	95	97	96	98	100	95	87	86	85	78	83	92	94	95	101	98	94	93	94	97	94	95	92	94	..	91.4
	Minimum	47	50	46	63	44	53	55	54	60	69	70	52	53	54	50	40	58	64	50	65	58	53	51	54	56	57	58	50	54	..	..	55.2
Grafton	Maximum	85	75	89	90	79	89	92	93	97	98	96	94	84	81	79	75	79	83	81	84	93	94	91	97	97	94	93	96	86	81	..	88.2
	Minimum	47	48	41	61	59	54	58	65	63	66	67	65	51	51	55	52	39	49	52	46	48	52	63	64	68	67	66	71	62	47	..	56.6
Lost Creek	Maximum	78	73	85	84	76	85	87	90	92	93	92	87	80	80	77	70	80	78	82	80	93	87	90	91	92	89	84	88	78	77	..	83.8
	Minimum	48	43	36	64	56	50	55	60	61	60	62	62	46	57	50	47	34	46	49	43	49	65	62	60	68	60	64	68	56	40	..	54.0
Mannington	Maximum	77	74	84	86	74	82	87	91	93	91	90	84	79	79	77	72	77	81	81	76	89	85	88	93	92	91	86	89	85	77	..	83.6
	Minimum	46	45	41	61	58	51	58	62	65	62	66	64	49	57	54	47	37	49	51	43	49	64	67	63	69	62	65	66	61	44	..	55.9
Morgantown	Maximum	75	73	86	82	73	85	88	90	94	92	91	84	80	80	76	72	81	83	81	82	91	83	89	93	93	88	86	89	82	84	..	84.2
	Minimum	53	50	46	64	55	57	..	63	68	67	68	65	51	57	55	49	41	53	57	46	53	67	67	65	70	64	66	68	60	47	..	58.3
New Cumberland	Maximum	75	77	82	80	71	80	88	94	95	93	92	90	77	78	78	70	75	82	75	76	85	75	90	95	95	90	85	84	75	80	..	82.7
	Minimum	53	44	44	63	51	46	62	68	68	66	62	66	46	59	55	47	36	48	56	43	52	63	65	65	67	65	64	66	55	55	..	56.7
New Martinsville	Maximum	84	79	86	89	80	88	91	94	97	96	96	93	83	85	80	77	83	82	83	82	92	89	92	96	96	94	89	89	76	83	..	87.5
	Minimum	50	48	45	65	59	54	61	65	68	66	69	66	53	61	55	51	43	54	56	46	53	86	86	85	71	65	67	70	61	49	..	59.1
Parkersburg	Maximum	74	75	87	90	77	85	90	94	96	97	95	83	79	82	78	71	79	76	84	80	95	90	92	96	97	93	87	90	68	77	..	85.2
	Minimum	55	54	51	66	63	59	65	68	70	69	67	65	57	64	62	54	50	62	57	48	57	66	70	69	71	67	69	68	58	51	..	61.7
Parsons	Maximum	79	80	84	82	78	83	84	87	90	89	89	86	85	79	77	74	81	78	80	79	89	85	91	87	89	88	83	87	73	76	..	83.1
	Minimum	43	42	37	53	60	49	51	60	62	66	64	58	50	50	51	42	34	48	51	46	51	51	64	63	64	65	65	65	60	43	..	53.6
Philippi	Maximum	81	76	90	85	79	84	89	93	95	95	92	89	86	84	85	80	65	81	86	87	97	91	90	97	94	92	89	82	80	80	..	86.5
	Minimum	46	45	39	67	58	57	71	70	67	68	65	66	49	52	55	45	33	60	63	58	67	61	68	70	73	61	67	70	60	55	..	59.5
Pickens	Maximum	77	71	82	81	77	81	81	82	86	87	89	82	76	73	75	67	78	78	79	82	88	80	81	85	83	80	81	76	68	72	..	79.3
	Minimum	49	49	45	61	56	56	64	61	56	64	63	63	53	55	56	46	40	53	46	57	61	56	53	62	59	64	63	60	55	44	..	55.7
Wellsburg	Maximum	75	71	81	78	72	80	85	89	90	89	88	81	74	78	72	68	75	79	75	73	84	85	87	90	91	89	84	80	78	74	..	80.5
	Minimum	58	48	49	62	53	51	63	69	70	72	66	66	51	58	55	46	42	56	56	44	53	65	64	65	70	65	66	65	56	50	..	58.5
Weston§	Maximum	88	80	82	86	82	84	90	94	92	94	92	88	86	82	80	74	80	84	86	92	94	86	90	94	90	92	90	84	78	76	..	86.3
	Minimum	60	58	56	58	58	54	62	66	68	64	68	66	58	54	64	54	58	60	50	58	60	66	64	66	72	66	68	64	62	60	..	61.4
Wheeling§	Maximum	72	81	82	85	81	88	89	96	99	95	93	89	86	88	77	77	81	83	82	81	90	91	91	96	94	91	89	83	61	89	..	86.0
	Minimum	53	46	46	52	58	52	57	66	71	68	65	66	50	50	55	50	43	50	61	49	53	57	70	66	70	66	62	68	61	47	..	57.6
Southern Section.																																	
Beckley	Maximum	84	83	85	88	80	85	87	88	88	88	91	89	91	82	83	88	80	76	78	88	88	90	91	90	91	89	91	90	80	81	..	86.1
	Minimum	50	52	56	54	50	49	61	60	60	59	65	70	58	50	50	40	43	48	50	50	54	60	63	64	61	69	62	60	60	55	..	56.3
Bluefield	Maximum	83	79	80	85	82	..	..	85	89	91	42	92	83	..	80	85	78	78	80	82	..	90	90	90	92	94	95	94	94	84	..	86.4
	Minimum	56	60	55	67	62	..	..	57	61	65	65	65	65	..	61	55	..	56	54	55	..	65	70	66	65	62	67	61	62	53	..	61.2
Charleston	Maximum	87	80	89	92	85	83	90	92	95	96	96	93	86	84	87	76	83	74	87	85	96	98	97	95	98	94	92	95	85	83	..	89.1
	Minimum	55	59	50	67	65	63	62	67	68	70	70	71	62	60	60	55	47	58	57	58	64	70	72	69	70	68	68	75	59	51	..	63.0
Elkhorn	Maximum	85	80	80	85	81	64	89	87	92	94	94	92	83	85	83	75	78	77	78	84	91	91	91	89	94	95	92	94	90	86	..	86.0
	Minimum	60	60	56	55	63	54	59	57	63	65	64	66	67	60	63	55	50	56	54	57	59	60	65	64	64	65	63	69	59	52	..	60.1
Green Sulphur Spgs.	Maximum	88	79	83	89	85	74	86	88	92	93	93	92	86	81	84	78	81	74	85	86	92	92	93	91	96	94	94	94	90	83	..	87.2
	Minimum	46	56	45	57	61	61	57	62	64	64	63	63	63	56	54	59	41	50	55	57	65	62	64	62	64	62	63	64	56	47	..	58.1
Hinton§	Maximum	92	82	86	93	74	72	88	90	84	95	97	96	90	82	89	80	82	69	85	88	97	96	98	95	98	95	98	98	90	85	..	89.1
	Minimum	54	59	50	56	64	64	59	63	67	68	67	69	67	62	61	55	47	55	56	60	67	66	68	67	68	65	67	67	62	53	..	61.8
Holcomb§	Maximum	84	77	82	88	75	78	86	89	93	92	92	90	87	82	81	75	81	75	83	86	93	89	90	90	95	93	92	94	76	82	..	85.7
	Minimum	42	55	41	58	59	55	54	60	58	62	61	60	54	56	50	47	36	47	55	52	56	66	64	59	61	57	63	68	51	42	..	55.0
Huntington§	Maximum	80	81	90	92	75	89	87	96	97	98	96	89	88	89	86	78	78	84	86	88	94	98	98	95	98	96	94	95	79	82	..	89.2
	Minimum	55	61	51	59	67	61	65	63	71	69	70	75	62	63	60	58	51	57	60	60	60	74	73	71	75	67	68	70	62	52	..	63.8
Lewisburg	Maximum	85	78	80	88	78	74	86	87	89	91	91	91	85	82	83	76	79	68	82	84	92	93	92	92	96	95	92	96	84	84	..	85.8
	Minimum	47	54	45	55	61	59	58	59	60	61	64	63	64	57	54	48	43	46	54	49	60	63	65	62	64	61	67	64	58	47	..	57.1
Madison§	Maximum	89	82	90	95	77	85	90	92	97	96	92	..	88	86	89	80	87	73	86	88	95	98	100	96	98	98	97	97	80	..	..	90.2
	Minimum	54	57	49	48	65	64	63	65	68	70	68	63	..	59	59	54	40	49	55	57	61	69	69	69	69	68	68	67	57	50	..	60.5
Marlinton	Maximum	..	..	..	..	..	..	..	84	89	88	87	82	82	69	76	62	72	66	76	78	89	80	84	86	87	85	83	88	74	78	..	80.2
	Minimum	..	36	..	..	..	..	..	..	55	58	57	57	52	50	52	46	32	40	47	47	58	56	58	60	58	56	59	57	52	41	..	51.5
Point Pleasant	Maximum	74	81	90	92	85	88	94	96	99	100	99	93	87	89	86	81	88	78	90	88	101	100	102	104	103	101	92	95	83	84	..	91.4
	Minimum	52	48	45	63	62	55	62	65	67	65	66	67	51	57	54	50	42	61	55	51	54	75	70	67	71	63	67	71	56	47	..	59.3
Powellton	Maximum	89	84	89	93	81	79	91	95	96	97	96	95	88	88	90	83	87	78	86	..	97	90	99	97	102	97	98	100	90	88	..	91.1
	Minimum	60	54	47	65	64	62	57	58	63	66	65	68	60	54	56	58	43	56	58	..	61	70	67	66	66	66	67	73	57	49	..	60.6
Robertsburg§	Maximum	85	80	89	91	80	88	94	96	98	98	95	89	86	85	84	76	86	75	86	90	98	96	98	99	99	100	94	93	74	83	..	89.5
	Minimum	50	54	44	62	60	59	60	64	69	65	65	65	55	55	56	54	46	58	56	56	55	70	72	69	71	63	68	70	56	48	..	59.8
Ryan	Maximum	80	77	85	92	78	82	89	92	95	96	95	87	86	85	83	77	83	75	85	85	93	95	90	97	95	92	90	94	86	80	..	87.3
	Minimum	45	52	43	60	64	43	54	61	65	62	63	61	60	54	54	55	39	50	50	49	66	68	70	75	76	73	69	70	54	43	..	58.3
Spencer§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Union§	Maximum	66	75	79	88	74	80	86	88	90	92	93	90	86	85	84	78	77	79	81	89	92	92	93	92	95	94	94	90	85	85	..	85.7
	Minimum	48	60	48	53	61	59	57	58	60	61	62	64	54	56	54	52	48	48	50	52	59	59	65	65	64	61	67	65	57	51	..	57.3
Williamson§	Maximum	86	79	88	90	77	80	87	90	94	93	95	90	83	82	86	76	80	86	83	84	92	92	92	93	95	94	96	95	81	83	..	87.4
	Minimum	60	60	50	50	64	64	63	66	68	69	67	68	65	62	63	57	50	50	55	57	60	62	67	67	68	65	68	71	60	51	..	61.6

§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
Statute Miles
Kilometers
No Rain
Edmonton
Banff
The Pas
Prince Albert
Calgary
Medicine Hat
Qu' Appelle
Swift Current
Minnedosa
Winnipeg
Kamloops
Spokane
Walla Walla
Baker
Boise
Helena
Billings
Miles City
Yellowstone Park
Sheridan
Rosseau
Rapid City
Huron
Lander
Cheyenne
Grand Junction
Denver
Leadville
Canon City
Pueblo
Trinidad
Modena
Tonopah
Independence
Fresno
Los Angeles
Phoenix
Tucson
Yuma
Flagstaff
Santa Fe
Roswell
Amarillo
El Paso
Abilene
Dallas
Fort Worth
Palestine
Austin
Houston
Galveston
Corpus Christi
Brownsville
Oklahoma
Fort Smith
Little Rock
Shreveport
New Orleans
Barrwood
Memphis
Nashville
Knoxville
Asheville
Chattanooga
Birmingham
Atlanta
Montgomery
Jacksonville
Miami
Key West
Nassau
Havana
Cienfuegos
Puerto Principe
Santiago de Cuba
Bermuda
Hatteras
Cape Henry
Cape May
Atlantic City
Sandy Hook
Block Id
Port Huron
Detroit
Toledo
Cleveland
Sandusky
Buffalo
Rochester
Syracuse
Albany
Utica
Oswego
Kingston
Ottawa
Montreal
Quebec
Father Point
Chatham
Sydney
St. John
Halifax
Antigosh
Cochrane
White River
Port Arthur
Sault Ste Marie
Stonecliffe
Parry Sound
Saugeen
Collingwood
Toronto
Hamilton
Port Hope
Kingston
Belleville
Peterboro
Lindsay
Orillia
Barrie
Owen Sound
Guelph
Stratford
London
Windsor
Chatham
Sarnia
Goderich
Kincardine
Walkerton
Hanover
Port Elgin
Southampton
Wiarton
Meaford
Thornbury
Collingwood
Midland
Penetanguishene
Orillia
Lindsay
Peterboro
Belleville
Kingston
Brockville
Cornwall
Ottawa
Pembroke
Renfrew
Arnprior
Carleton Place
Almonte
Perth
Smiths Falls
Prescott
Gananoque
Napanee
Picton
Trenton
Cobourg
Port Hope
Bowmanville
Oshawa
Whitby
Toronto
Hamilton
Brantford
Woodstock
Ingersoll
Tillsonburg
Simcoe
Port Dover
Dunnville
Welland
St. Catharines
Niagara Falls
Fort Erie
Port Colborne
Thorold
Grimsby
Beamsville
Jordan
Vineland
Port Dalhousie
Merritton
Lockport
Rochester
Batavia
Attica
Warsaw
Wyoming
Geneseo
Avon
Lima
Canandaigua
Geneva
Seneca Falls
Auburn
Skaneateles
Cazenovia
Oneida
Rome
Utica
Little Falls
Herkimer
Fonda
Amsterdam
Schenectady
Troy
Albany
Hudson
Catskill
Kingston
Poughkeepsie
Newburgh
Middletown
Port Jervis
Monticello
Liberty
Callicoon
Hancock
Deposit
Binghamton
Owego
Waverly
Elmira
Corning
Hornellsville
Dansville
Mount Morris
Geneseo
Avon
Rochester
Lockport
Niagara Falls
Buffalo
Dunkirk
Fredonia
Jamestown
Warren
Oil City
Franklin
Titusville
Meadville
Conneaut
Ashtabula
Painesville
Cleveland
Akron
Canton
Massillon
Orrville
Wooster
Mansfield
Shelby
Norwalk
Sandusky
Port Clinton
Fremont
Bellevue
Tiffin
Fostoria
Findlay
Bowling Green
Toledo
Defiance
Napoleon
Wauseon
Archbold
Bryan
Montpelier
Hicksville
Edgerton
Auburn
Fort Wayne
Huntington
Wabash
Peru
Logansport
Kokomo
Marion
Muncie
Winchester
Portland
Decatur
Bluffton
Warren
Celina
Coldwater
Sidney
Piqua
Troy
Dayton
Springfield
Xenia
Urbana
Zanesville
Cambridge
Cadiz
Steubenville
Wheeling
Parkersburg
Point Pleasant
Huntington
Ashland
Ironton
Portsmouth
Chillicothe
Athens
Pomeroy
Middleport
Gallipolis
Jackson
Logan
Lancaster
Newark
Mount Vernon
Millersburg
Wooster
Orrville
Massillon
Canton
Akron
Cleveland
Painesville
Ashtabula
Conneaut
Meadville
Titusville
Oil City
Franklin
Warren
Jamestown
Fredonia
Dunkirk
Buffalo
Niagara Falls
Lockport
Rochester
Batavia
Attica
Warsaw
Wyoming
Geneseo
Avon
Lima
Canandaigua
Geneva
Seneca Falls
Auburn
Skaneateles
Cazenovia
Oneida
Rome
Utica
Little Falls
Herkimer
Fonda
Amsterdam
Schenectady
Troy
Albany
Hudson
Catskill
Kingston
Poughkeepsie
Newburgh
Middletown
Port Jervis
Monticello
Liberty
Callicoon
Hancock
Deposit
Binghamton
Owego
Waverly
Elmira
Corning
Hornellsville
Dansville
Mount Morris
Geneseo
Avon
Rochester
Lockport
Niagara Falls
Buffalo
Dunkirk
Fredonia
Jamestown
Warren
Oil City
Franklin
Titusville
Meadville
Conneaut
Ashtabula
Painesville
Cleveland
Akron
Canton
Massillon
Orrville
Wooster
Mansfield
Shelby
Norwalk
Sandusky
Port Clinton
Fremont
Bellevue
Tiffin
Fostoria
Findlay
Bowling Green
Toledo
Defiance
Napoleon
Wauseon
Archbold
Bryan
Montpelier
Hicksville
Edgerton
Auburn
Fort Wayne
Huntington
Wabash
Peru
Logansport
Kokomo
Marion
Muncie
Winchester
Portland
Decatur
Bluffton
Warren
Celina
Coldwater
Sidney
Piqua
Troy
Dayton
Springfield
Xenia
Urbana
Zanesville
Cambridge
Cadiz
Steubenville
Wheeling
Parkersburg
Point Pleasant
Huntington
Ashland
Ironton
Portsmouth
Chillicothe
Athens
Pomeroy
Middleport
Gallipolis
Jackson
Logan
Lancaster
Newark
Mount Vernon
Millersburg

NE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

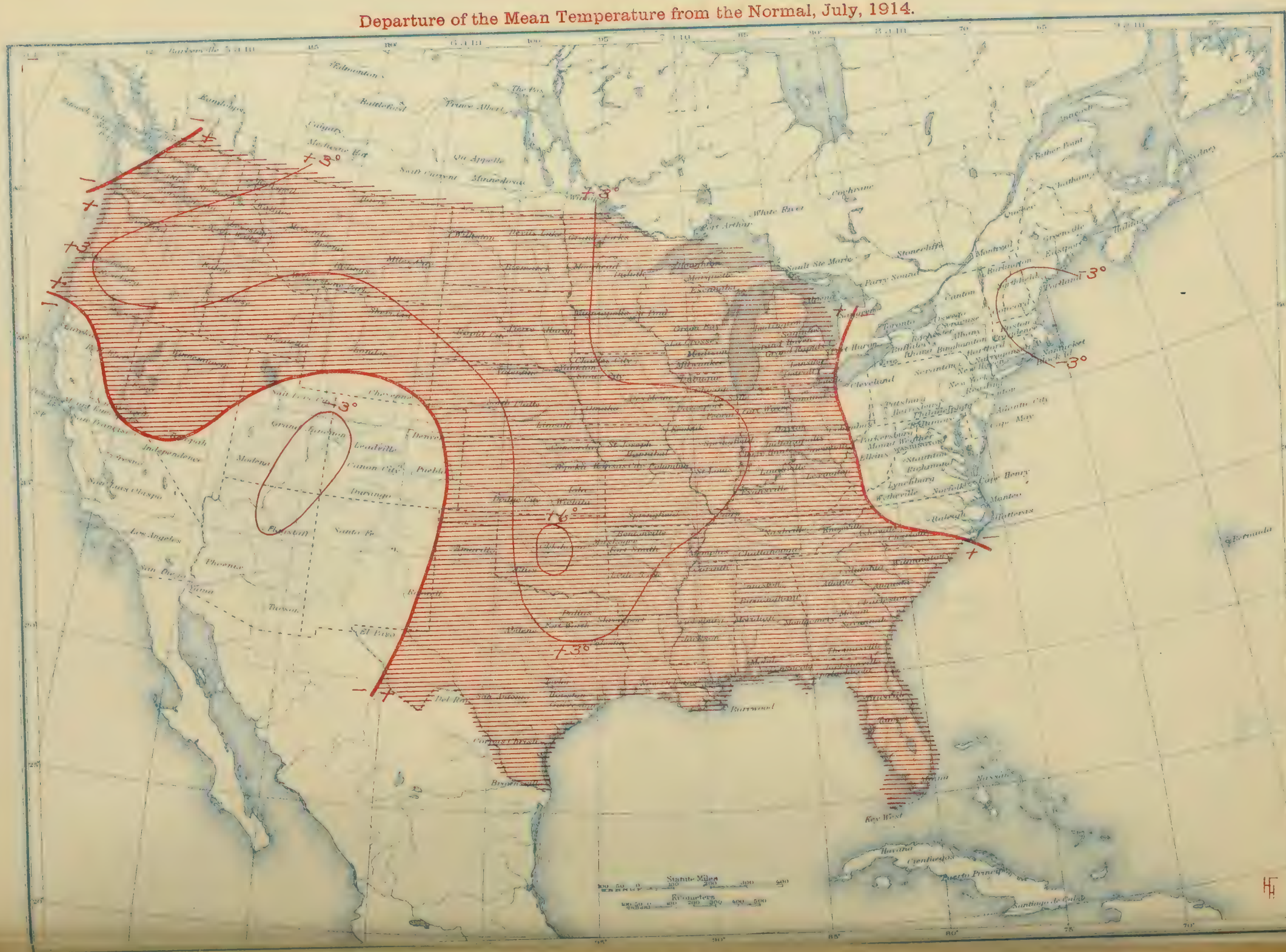
WEST VIRGINIA SECTION

JULY, 1914

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
AUGUST 20, 1914

Departure of the Mean Temperature from the Normal, July, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXII. PARKERSBURG, W. VA., JULY, 1914. No. 7.

GENERAL SUMMARY.

The weather for July was characterized by two periods of high temperatures, three periods of abnormally low temperatures, light and unfavorably distributed rainfall, and an excess of sunshine. The high temperature records were nearly equalled at many stations and the highest temperatures of record occurred in a few sections. In only four years of record were lower temperatures recorded in July. The average temperature for the month was normal. A severe drought prevailed in nearly all the agricultural districts until the 13th and the conditions were droughty at the close of the month. Crops suffered from lack of moisture and the rivers and streams were unusually low.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.01 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.24 inches on the 22d, and 29.76 inches on the 14th. Elkins, 30.26 inches on the 23d, and 29.80 inches on the 14th. The pressures were considerably below the normal from the 18th to the 23d. A high pressure area of considerable force covered the State from the 28th to the 31st.

TEMPERATURE.

The month opened cool and the temperatures continued somewhat below the normal until the 8th. The temperatures were abnormally high from the 9th to the 17th. On the 12th the maximum readings in many sections ranged from 98° to slightly more than 100°. A temperature of 106° was recorded at Point Pleasant. A temperature of 106° was also recorded in July, 1911. Abnormally low temperatures prevailed on the 19th and 20th. High temperatures again prevailed from the 21st to the 27th. The maximum readings on the 23d, 24th, and 25th ranged generally from 90° to 100°. Much cooler weather set in on the 28th and the last three days were abnormally cool. A killing frost was observed at Osceola on the 30th.

HUMIDITY.

The average of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 73 per cent; 8 p. m., 56 per cent. The July averages for the same hours for the past 26 years are 80 and 68 per cent, respectively. Elkins, 8 a. m., 84 per cent; 8 p. m., 74 per cent. The July averages for Elkins for the same hours for the past 14 years are 87 and 78 per cent, respectively.

PRECIPITATION.

Scattered light showers occurred on the 1st and 2d. Good showers fell in the eastern panhandle section on the 4th and 6th. Widely scattered showers also fell in the other districts from the 4th to the 6th. A few showers were received on the 10th and 11th. Showers, heavy in many sections, occurred daily from the 13th to the 18th, the greatest amounts being recorded on the 14th and 15th. Good showers also occurred in many sections from the 24th to the 28th. The rainfall was lightest over the western counties and Monongahela basin. The amounts were in excess in sections of the southern and central counties and upper portions of the Cheat and Potomac basins.

WIND.

The average velocity of the wind at Parkersburg was 4.7 miles per hour, or 0.2 of a mile above the July average for the past 24 years. The average at Elkins was 2.9 miles per hour, or 0.1 of a mile below the July average for the past 15 years. The highest velocity at Parkersburg was 27 miles per hour from the northwest on the 13th. At Elkins, 26 miles per hour from the northwest on the 24th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 64 per cent of the possible amount, or 2 per cent above the July average for 17 years. The average at Elkins was 59 per cent, or 5 per cent above the July average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 20th, 21st, 22d, 23d, 27th, 30th, and 31st; Elkins, 3d, 6th, 10th, 11th, 20th, 22d, 27th, 29th, 30th, and 31st; Grafton, 7th, 9th, 10th, 11th, 20th, 21st, 22d, and 23d; Mannington, 3d, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 16th, 22d, 23d, 27th, and 31st; Philippi and Wellsburg, 3d.

Frost, killing: Osceola, 30th.

Hail: Burlington, 4th; Romney, 4th, 10th, and 13th; Ryan, Sutton, and Union, 9th.

Thunderstorms (Dates and number of stations reporting): 1st, 2; 2d, 1; 4th, 11; 5th, 4; 6th, 2; 9th, 6; 10th, 11; 11th, 3; 12th, 5; 13th, 13; 14th, 15; 15th, 6; 16th, 2; 17th, 1; 18th, 1; 19th, 1; 24th, 11; 25th, 5; 26th, 14; 27th, 2; 28th, 8; 29th, 1.

COMPARATIVE DATA FOR JULY.

Year.	Temperature.			Precipitation.
	Mean.	Highest.	Lowest.	
1891	67.5	..	..	5.59
1892	73.4	98	41	4.20
1893	73.8	98	42	2.96
1894	73.3	100	36	2.21
1895	70.5	99	39	4.35
1896	73.3	97	46	9.07
1897	74.2	102	46	5.43
1898	75.0	103	40	4.46
1899	73.3	100	33	3.78
1900	74.7	104	41	4.38
1901	77.4	104	47	3.16
1902	74.2	104	45	3.54
1903	72.5	100	37	3.74
1904	71.5	97	42	3.28
1905	73.3	98	43	5.92
1906	72.4	98	45	4.54
1907	72.7	98	42	6.66
1908	74.0	100	41	5.21
1909	70.2	96	36	4.17
1910	73.8	98	41	4.92
1911	73.3	106	40	2.82
1912	72.0	100	45	7.48
1913	74.2	103	40	5.80
1914	73.1	106	38	4.11
Entire period	73.1	106	33	4.66

Climatological Data for July, 1914.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	67.5	−0.3	91	12	38	31	41	5.46	+0.38	1.07	0	12	13	12	6	w.	Solomon Clark
Burlington	Mineral	875	20	71.8	−1.1	92	12†	43	30	39	4.09	+0.49	1.40	0	6	5[a]	23[a]	2[a]	nw.	J. W. Vandiver
Franklin	Pendleton	641	8	65.0	.....	87	24	40	31	30	4.65	.....	1.90	0	5	7	17	7	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	1.28	−2.15	0.35	0	9	.....	.....	.....	e.	S. W. Lightner
Lost City	Hardy	.....	8	69.1	.....	88	25	44	31	32	3.19	.....	1.10	0	8	3	24	4	w.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	75.4	0.0	100	23	50	31	34	2.42	−1.62	0.65	0	10	19	9	3	ne.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John C. Fisher
Romney	Hampshire	824	17	72.8	−2.5	97	23	47	31	35	6.09	+2.67	2.17	0	8	.....	.....	.....	.....	Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	71.2	−1.3	94	22	43	31	39	4.57	+0.75	2.63	0	7	6	18	7	w.	J. M. Mallow
Averages and	Extremes	.....	.....	70.4	−1.0	100	23	38	31	41	3.97	+0.09	2.63	0	8	9	17	5	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	75.2	0.0	100	12	51	31	35	4.02	−0.85	2.18	0	7	29	2	0	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	4.23	.....	1.23	0	9	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	71.1	−1.4	94	12	43	31	34	3.85	−1.64	1.10	0	9	24	3	4	.....	H. A. Darnall
Cairo	Ritchie	674	12	75.7	+1.4	102	13	50	30	40	2.44	2.14	0.98	0	8	2[d]	17[d]	8[d]	sw.	Van A. Zevely
Central Station	Doddridge	950	12	.....	.....	101	12	43	.....	.....	2.67	−1.83	.....	0	.....	.....	.....	.....	.....	G. W. Sherwood
Cheat Bridge*	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	4.63	.....	1.13	0	7	.....	.....	.....	.....	Franz A. Degler
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	7.28	.....	1.30	0	12	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	75.7	+1.1	105	12	47	31	45	3.70	−0.14	0.96	0	9	10	14	7	sw.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	6.55	.....	1.62	0	13	18	4	9	sw.	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	4.16	.....	2.25	0	5	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	69.8	−0.6	92	12	43	31	35	7.74	+3.10	2.90	0	10	9	13	9	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	74.8	+0.4	102	12	47	31	43	3.11	−1.84	0.91	0	6	23	1	7	w.	F. P. Hall
Glenville	Gilmer	738	25	76.8	+2.2	101	12	52	30	40	3.64	−1.94	1.36	0	6	18	12	1	w.	Joe N. Craddock
Grafton	Taylor	1,000	22	73.2	+0.2	98	12†	45	31	39	2.37	−2.82	0.78	0	7	15	10	6	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	70.3	−2.2	99	12	40	31	42	3.18	−1.80	1.29	0	5	20	7	4	sw.	Allen Smith
Mannington	Marion	974	12	71.2	−1.6	96	12	44	31	38	4.47	−0.46	1.23	0	10	18	7	6	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	73.2	−0.4	96	12†	49	30†	35	3.48	−1.85	1.35	0	4	6	21	4	.....	Prof. Edgar L. Andrews
Moundsville[a]	Marshall	642	12	75.6	+1.3	102	12	46	30	43	1.82	−2.99	0.35	0	9	19	6	5	w.	M. L. Brown
New Cumberland	Hancock	987	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Frank S. Evans
New Martinsville	Wetzel	634	21	75.5	−0.1	103	12	50	30†	40	3.45	−1.55	1.30	0	6	21	5	5	n.	Wm. Ankrom
Osceola	Randolph	3,600	0	.....	.....	.....	.....	.....	.....	.....	6.90	.....	1.70	0	8	.....	.....	.....	.....	A. T. Dohmer
Parkersburg	Wood	638	26	76.0	+0.3	100	12	53	31	37	2.13	−2.53	1.70	0	5	16	12	3	n.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	69.4	−1.1	92	11†	42	31	39	4.95	−0.35	1.50	0	12	12	15	4	.....	J. W. Swisher
Philippi	Barbour	1,149	22	75.2	+2.4	99	12	43	31	38	3.37	−1.91	0.77	0	12	16	12	3	w.	J. D. Dadisman
Pickens*	Randolph	2,697	24	67.0	+2.1	87	12	44	31	29	4.63	−1.79	1.85	0	8	21	5	5	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	4.56	−0.42	1.30	0	14	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	1.78	.....	1.51	0	4	.....	.....	.....	.....	J. O. Goodman
Smithfield	Wetzel	835	10	73.9[b]	.....	102[b]	12	43[b]	31	45[b]	2.48	−2.99	0.52	0	9	17	8	6	ne.	G. M. Whisler
Terra Alta	Preston	2,612	14	68.2	−1.3	88	13	45	29	36	3.35	−2.56	1.10	0	5	24	5	2	w.	H. N. Cuppett
Wellsburg	Brooke	1,225	20	71.7	−0.2	90	12†	51	30	31	2.06	−2.72	0.42	0	11	12	17	2	w.	C. P. Waugh
Weston	Lewis	1,026	26	74.2	−0.7	98	12	54	3†	36	3.80	−0.85	1.30	0	10	13	12	6	s.	Miss C. M. Davis
Wheeling	Ohio	645	30	73.4	.....	98	12	49	30	38	1.57	−3.13	0.43	0	10	21	2	8	s.	Miss M. B. Forsyth
Averages and	Extremes	.....	.....	73.3	0.0	105	12	40	31	45	3.76	−1.57	2.90	0	8	17	9	5	w.	
Southern Section.																				
Bancroft	Putnam	574	11	.....	.....	.....	.....	.....	.....	.....	4.73	+0.19	2.75	0	6	19	0	12	.....	R. E. Dent
Beckley*	Raleigh	2,440	15	70.9	−0.6	91	12	46	29	38	0.98	−3.00	0.65	0	3	23	0	8	w.	John A. Ewart
Bluefield	Mercer	2,558	20	72.0[d]	+0.1	94[d]	12	47[d]	30	39[e]	3.35	−1.01	0.95	0	6	18[b]	11[b]	0[b]	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	76.2	−0.2	100	12	53	31	36	4.92	+0.86	1.80	0	9	21	3	7	w.	R. C. Hewes
Cuba*	Jackson	650	14	74.6	+1.4	103	12	47	31	41	2.60	−1.73	1.45	0	4	9	20	2	w.	C. T. Perry
Doane	Wayne	717	7	.....	.....	.....	.....	.....	.....	.....	5.90	.....	2.10	0	5	23	7	1	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	72.9	+0.8	95	12	48	30†	37	5.55	+0.11	2.15	0	9	13	18	0	w.	J. J. Lincoln
Green Sulphur Spgs	Summers	1,600	19	72.0	−0.5	98	12	43	31	40	4.79	+1.17	2.10	0	7	16	11	4	w.	Arthur George
Hinton	do	1,450	25	75.6	+1.1	99	12	49	31	37	4.81	+1.23	3.15	0	9	14	0	17	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	70.3	.....	95	12	40	31	45	4.45	.....	1.60	0	8	19	2	10	.....	R. E. Ferguson
Huntington	Cabell	538	19	77.7	+1.1	104	12	54	30†	38	3.73	−0.70	1.37	0	5	16	1	14	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	70.9	−0.6	95	12	43	31	38	4.74	+0.77	1.51	0	9	29	2	0	nw.	Geo. T. Argabrite
Logan	Logan	687	12	76.6	+1.4	95	12†	55	31	29	5.09	−0.95	2.87	0	6	18	13	0	e.	Dr. J. E. McDonald
Madison	Boone	704	9	76.2[a]	.....	104[a]	12	51	31	41[a]	6.85	+1.87	1.92	0	8	21	9	1	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	65.8	-3.6	89	12	40	30†	40	3.73	−1.29	1.16	0	8	16	13	2	.....	C. J. McCarty
Nuttallburg	Fayette	2,252	22	.....	.....	.....	.....	.....	.....	.....	4.16	−0.19	1.20	0	8	12	17	2	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	77.2	+0.6	106	12	47	31	44	2.78	−1.34	1.12	0	5	13	11	7	se.	W. D. Holmes
Powellton	Fayette	933	17	74.6	+0.4	100	12	47	31	42	6.23	+1.59	2.00	0	8	16	14	1	.....	Morris Hansford
Princeton	Mercer	2,395	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Scott
Robertsburg	Putnam	574	14	76.6	+0.7	104	12	47	31	45	1.66	−2.47	1.20	0	3	14	2	15	s.	E. C. Brace
Ryan	Roane	700	11	74.4	+1.6	98	11†	43	31	42	3.21	−1.72	2.09	0	7	15	14	2	.....	Wm. E. Ryan
Spencer*	do	784	16	72.6	.....	96	8	45	31	40	4.68	+0.12	1.90	0	7	13	18	0	.....	A. M. McKown
Sutton	Braxton	839	11	75.0[b]	.....	101[b]	12	.....	.....	.....	5.58	+0.77	.....	0	.....	.....	.....	.....	.....	Ben Gillespie
Union	Monroe	2,250	10	72.2	+1.1	96	12	45	31	36	5.58	+1.32	2.07	0	8	.....	.....	.....	.....	Shelton Clark
Williamson	Mingo	660	13	73.3	−2.7	97	12	49	31	35	5.76	+1.22	1.96	0	8	20	8	3	w.	J. F. Keyser
Averages and	Extremes	.....	.....	73.9	+0.1	106	12	40	30†	45	4.65	+0.08	3.15	0	7	18	8	5	w.	
State Averages and	Extremes	.....	.....	73.1	−0.1	106	12	38	31	45	4.11	−0.71	3.15	0	7	16	10	5	w.	

* The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for July, 1914.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac	T.			.83	.10	.07			T.	T.			.85	.07	.95	.20	T.								.88	.40		1.07	.02	.02		5.46
Burlington	do	T.			1.40		.35					T.	.16	.13			1.30								T.		T.		.75				4.09
Franklin	do			1.90	T.							T.		1.00	.05		T.										1.40	.30					4.65
Harpers Ferry	do					.20		.11				T.		.21	T.	.06	T.	.35								.05			.20	.05		.05	1.28
Lost City	do	.03			1.10		.10	T.						1.01	.10												.25	.40	.20				3.19
Martinsburg	do	.25	T.				.23					T.		.23	.07	.10	.15								.15				.26	.33	.65		2.42
Moorefield	do																																
Romney	do				.80		.42			.55				.42	1.15	2.17													.38	.20			6.09
Upper Tract	do				2.63	T.	.13					T.		.55		.30									.20		.41		.35				4.57
Northern Section.																																	
Bens Run	Ohio	.11												1.08	2.18		.21	.05							.32	.07						4.02
Brandonville	Monongahela						.28				.70	1.23		.06		.55	.06								.28	.07		1.00				4.23
Buckhannon	do	T.			.10					T.				.30	1.10	.95	.23	T.				.35			.40	.10	.32					3.85
Cairo	Little Kanawha													.55	.38	.98		.15	.08						.13		.11	.06					2.44
Central Station	Middle Is. Creek	*	*	*	*	T.								.48	.66	.05		.17	.41		*	*	*	*	*	*	.90						2.67
Cheat Bridge	Monongahela																																
Cortland	do					.95				.09				.20	.90	1.19	.99	.24	.80						.15	.05	.42	1.30					7.28
Creston	Little Kanawha		T.									.05		.10	.81	.73			.40				.60		.05	.75	.21						3.70
Davis	Monongahela		T.			.64	.04	.07			T.			.58	.87	1.62	.06	.08	.19						T.	.17	.58	.03	1.62				6.55
Elizabeth	Little Kanawha														.76	.23			.67								.25	2.25					4.16
Elkins***	Monongahela	T.	.01		1.57	T.				T.			T.	.20	2.17	.90	.24	T.							.32	.09	1.52		.72				7.74
Fairmont	do		.32					T.					T.	.08	.72	.91									.20	.88	T.						3.11
Glenville	Little Kanawha														1.17	1.36			.17						.37		.52	.05					3.64
Grafton	Monongahela	.06												.78	.74				.05						.20		.30		.24				2.37
Lost Creek	do	T.								T.				.43	1.29	.20		T.							1.14	T.	.12						3.18
Mannington	do	.21	T.					.01						.63	.28	1.22	.13	.01							.73	.02	1.23						4.47
Morgantown	do	.49													T.		.79								.85		T.		1.35				3.48
Moundsville	Ohio	.25	.08	T.							.30			.35	.17	.30	T.	T.	.19						.15	T.	.03	T.					1.82
New Cumberland	do																																
New Martinsville	do	.25												.80	1.30	.10									.30		.70						3.45
Osceola	Monongahela		.50			1.70		.40							1.30	.60			.40									.70	1.30				6.90
Parkersburg ***	Ohio	.02	T.								T.			.12	.23			.06							T.	T.	1.70						2.13
Parsons	Monongahela	.05			.10		.06			.12					1.30	1.00	.12	.10							.20	.35	.15	1.50					4.95
Philippi	do	.12			.04					.08				.69	.77	.37	.20	T.	.03						.38	.02	.29		.38				3.37
Pickens	do	T.			.07					.50					1.85	1.24	.17	.26			.04				.50	T.							4.63
Rowlesburg	do		.04			.14					.18			.34	.48	1.30	.06	.16	.04						.02	.40	.20	.30	.90				4.56
Saint Marys	Ohio													T.	.66	.85			.07						T.		.20						1.78
Smithfield	Fishing Creek							.06						.42	.38	.52	.18	.22							.11	.41	.18						2.48
Terra Alta	Monongahela													1.00	1.10		.20								.60	.45							3.35
Wellsburg	Ohio	.37								.42	.07			.29	.08	.17	.14	.01	.05						.30				.16				2.06
Weston	Monongahela		.02							.04					.62	.90	.46	.04	.10						.28	1.30	.04						3.80
Wheeling	Ohio		.30							T.				.10	.14	.30	.11	.01	T.						.05	.38	.11		.07				1.57
Southern Section.																																	
Bancroft	Great Kanawha											.05			1.55	2.75	.03									.11	T.	.24					4.73
Beckley	do	.15			.18												.65																0.98
Bluefield	do		.50											.65	.95		.70	.30								.25							3.35
Charleston	do											.07			1.80	1.70	.95	.28	.02							.05	.01	.04					4.92
Cuba	Sand Creek	T.												.25	1.45				.10						.05	.75							2.60
Doane	Big Sandy	T.	T.								.30				1.50	1.50	2.10											.50					5.90
Elkhorn	do	.37	.34							.34		.01	.30	1.04	T.			.57	.43							2.15							5.55
Green Sulphur Spgs.	Great Kanawha	.17	.08												2.10			.44	.34	.04						1.62							4.79
Hinton	do	T.	.50			.02					.16			.02	3.15		.08	.36	.28									.24					4.81
Holcomb	do		.56		.73					.14	T.		.17	1.60		.38	.27							T.		.60							4.45
Huntington	Ohio					T.						T.	T.		1.24	1.37	T.		T.							.30	.34	.48					3.73
Lewisburg	Great Kanawha	.24	.04		.12						.43			.83	1.51	T.		.19	.10							1.28							4.74
Logan	Guyandotte								T.		.40		T.		.90	.30	.17	.45								2.87	T.	T.					5.09
Madison	Great Kanawha		.02												1.75	.76	1.92	1.46	.05	T.						.33	.56						6.85
Marlinton	do		.30		.80	.50				.02				.03	1.16	.20										.72							3.73
Nuttallburg	do	T.			1.00						.10			.26	1.20		.90	.26	.14							.30							4.16
Point Pleasant	Ohio														.70	.02			.72				.22			1.12							2.78
Powelton	Great Kanawha	T.	.39									.88			2.00	.35	1.15	.03	.14							1.29							6.23
Princeton	do																																
Robertsburg	do														1.20	.23										.23							1.66
Ryan	do	T.			T.						T.			.54	2.09	.28	.04		.08				T.		T.	T.	.02	.16					3.21
Spencer	Little Kanawha																																
Sutton	Great Kanawha					T.					T.	T.			.55	1.75	.98		T.							*	*	1.90					5.58
Union	do		.03							.31	.42	T.		.19	2.01			.72	.22									.72					5.58
Williamson	Big Sandy		.18								T.			.04	1.14	.40	.02	1.96	.20								1.86						5.76

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

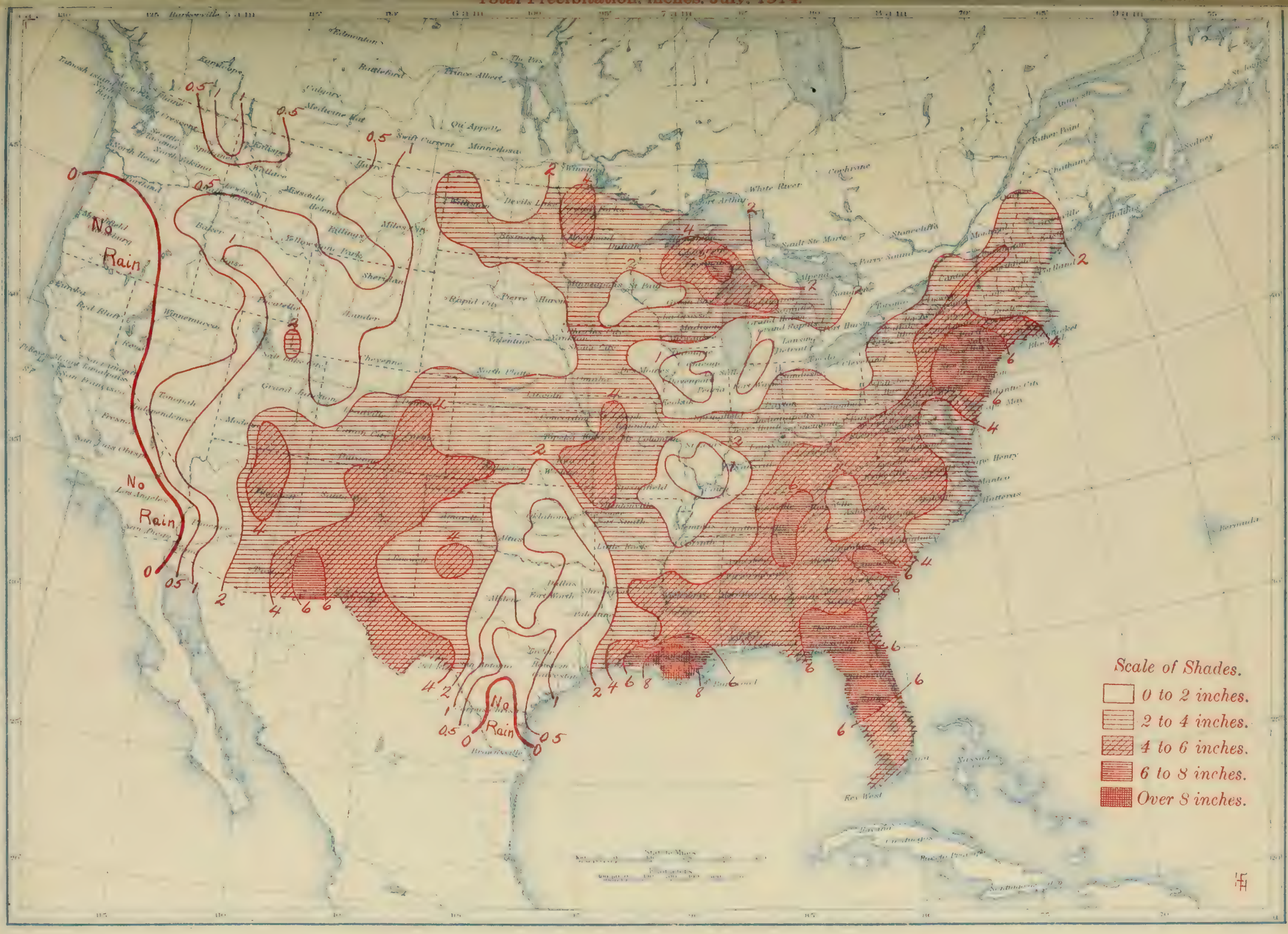
Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T Trace, or less than 0.01 inch.

Daily Temperatures for July, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	75	78	80	79	79	73	75	82	85	86	90	91	89	76	82	81	81	78	76	81	86	90	90	87	83	85	87	85	71	68	76	81.5
	Minimum	44	63	45	47	52	48	46	45	52	55	53	53	62	62	61	58	69	62	56	44	50	49	49	70	61	62	58	59	45	41	38	53.5
Burlington	Maximum	75	80	83	85	77	78	80	86	90	89	90	92	87	90	82	84	85	84	78	82	89	88	91	92	88	87	92	85	83	76	80	84.8
	Minimum	49	50	49	53	57	58	56	62	70	53	60	59	68	65	54	68	65	64	58	54	50	56	58	77	67	68	62	63	62	43	46	58.8
Lost City	Maximum	74	76	76	75	74	76	77	82	82	82	85	86	84	82	84	80	80	81	78	76	82	84	86	87	88	85	86	82	64	66	70	79.7
	Minimum	53	52	54	56	53	52	54	56	60	61	60	60	62	70	65	62	64	63	62	50	50	56	54	72	70	68	65	64	53	50	44	58.5
Martinsburg§	Maximum	80	84	84	74	80	76	80	89	91	93	95	95	87	83	88	91	90	89	81	88	94	96	100	92	87	93	98	85	79	76	80	87.0
	Minimum	59	60	62	62	60	60	59	60	65	67	66	67	69	70	68	69	70	74	65	55	60	63	66	70	72	70	67	67	55	52	50	63.8
Moorefield	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Romney	Maximum	70	83	81	82	78	77	78	88	90	90	89	91	88	82	84	85	88	84	78	85	90	92	97	94	90	90	94	86	74	70	70	84.5
	Minimum	50	64	55	53	57	57	57	55	59	64	62	63	68	67	71	65	68	72	65	50	65	60	62	74	67	68	65	64	50	48	47	61.0
Upper Tract	Maximum	80	82	85	85	80	77	80	86	87	88	90	92	87	83	85	86	83	84	81	85	88	94	93	93	90	85	90	84	75	73	78	84.8
	Minimum	50	64	50	53	57	57	54	55	57	57	60	59	65	64	64	62	66	67	57	48	54	55	56	57	63	66	64	62	50	45	43	57.5
Northern Section.																																	
Bens Run	Maximum	68	81	81	87	90	90	85	95	96	93	96	100	86	82	84	84	83	84	84	86	92	83	95	94	89	86	90	86	79	79	82	86.8
	Minimum	57	64	58	58	61	61	63	60	64	65	72	70	69	67	67	68	74	65	59	58	64	63	63	71	70	71	66	67	57	52	51	63.7
Buckhannon	Maximum	77	81	80	85	83	83	81	89	90	90	91	94	88	84	83	82	81	83	76	77	80	90	89	92	89	82	87	82	72	72	77	83.5
	Minimum	50	60	50	53	55	52	51	56	59	59	59	62	66	63	64	62	69	65	58	50	55	68	68	68	64	66	63	65	51	46	43	58.7
Central Station	Maximum	..	..	..	..	88	87	87	96	95	95	98	101	95	84	84	83	83	84	78	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	57	55	57	55	61	60	57	60	68	67	67	65	69	63	56	..	..	..	..	..	..	..	..	..	..	..	..	....
Creston	Maximum	77	90	90	91	93	92	92	101	99	99	100	105	90	85	83	84	86	89	83	89	95	96	97	95	98	87	91	89	82	83	86	90.9
	Minimum	54	63	53	56	59	56	59	56	63	61	60	62	67	67	67	66	71	65	57	54	59	57	58	69	68	69	63	66	55	50	47	60.5
Elkins	Maximum	79	79	79	82	82	80	80	88	89	90	90	92	87	82	80	83	79	80	74	81	86	90	88	86	87	83	86	79	70	69	75	82.4
	Minimum	49	57	52	53	57	55	52	54	58	59	59	59	67	64	63	62	70	60	54	50	56	55	55	64	63	66	65	57	50	47	43	57.3
Fairmont§	Maximum	71	86	87	91	91	88	87	98	97	97	99	102	88	86	87	85	81	87	85	89	96	98	95	95	91	90	96	86	78	79	85	89.4
	Minimum	51	60	55	56	60	57	55	55	50	62	61	62	69	68	67	65	65	64	58	54	59	58	60	72	67	64	66	65	55	49	47	60.3
Glenville	Maximum	94	97	95	97	97	98	96	98	99	98	99	101	97	93	91	89	98	92	84	93	96	98	96	97	96	98	98	88	84	82	81	94.2
	Minimum	58	60	59	58	61	60	59	61	63	60	62	65	58	58	57	56	63	61	54	59	61	64	61	68	59	58	64	57	54	52	53	59.5
Grafton	Maximum	74	71	82	82	83	83	92	90	93	97	96	98	93	86	88	89	82	82	81	86	92	97	95	98	88	88	91	90	79	69	76	86.8
	Minimum	52	65	54	49	57	54	53	61	60	62	58	60	67	67	66	65	68	66	56	53	58	59	57	72	66	69	67	64	51	49	45	59.7
Lost Creek	Maximum	70	81	81	85	85	83	84	91	91	90	95	99	90	83	81	79	80	82	79	84	89	92	90	88	87	84	88	82	74	71	79	84.4
	Minimum	49	62	48	50	54	50	49	50	58	57	61	57	65	63	65	66	60	61	58	49	56	52	53	65	64	66	60	57	54	44	40	56.2
Mannington	Maximum	71	80	79	85	85	83	82	91	90	91	93	96	89	80	83	83	80	82	78	84	90	92	93	91	85	84	88	81	74	72	78	84.3
	Minimum	51	61	52	52	58	53	54	53	60	59	58	59	67	67	66	63	66	61	54	52	56	55	57	66	66	67	66	64	52	46	44	58.2
Morgantown	Maximum	75	82	82	88	85	82	77	91	92	91	94	96	87	79	85	85	79	82	78	85	91	96	94	91	85	86	91	86	81	72	73	74	84.8
	Minimum	58	64	55	58	65	67	58	61	68	67	62	64	65	67	55	61	72	66	57	54	61	61	64	64	64	68	67	64	54	49	49	61.6
New Cumberland	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
New Martinsville	Maximum	73	85	83	88	90	89	87	95	96	96	97	103	90	86	87	85	84	85	81	89	95	98	96	96	86	89	62	87	80	79	86	88.8
	Minimum	55	63	57	57	60	62	58	64	64	60	60	63	68	68	68	67	73	64	56	56	61	61	60	71	70	70	68	66	57	50	50	62.2
Parkersburg	Maximum	72	83	81	85	85	85	87	94	94	91	96	100	88	84	85	83	87	85	78	88	93	97	96	96	93	89	91	82	76	76	82	87.2
	Minimum	60	65	60	60	62	63	62	63	70	69	63	66	70	68	71	71	74	68	59	58	64	60	63	75	71	67	66	68	60	56	53	64.7
Parsons	Maximum	72	79	78	85	84	82	79	89	90	89	92	92	90	88	80	82	74	80	75	81	88	90	89	87	85	83	87	80	78	75	74	83.1
	Minimum	48	52	50	59	57	56	51	50	55	62	57	56	60	57	55	64	68	60	57	50	54	56	50	53	63	65	67	60	50	45	42	55.8
Philippi	Maximum	75	88	81	90	91	81	84	93	93	95	97	99	90	83	85	87	85	85	79	87	91	95	94	92	89	86	90	81	74	73	81	86.9
	Minimum	62	65	67	70	65	70	49	70	60	68	66	67	68	67	61	63	70	72	65	50	65	68	70	68	67	68	65	65	50	49	43	63.6
Pickens	Maximum	75	74	75	79	76	76	76	82	83	82	84	87	82	77	76	75	71	72	68	77	80	82	84	80	74	82	83	77	66	66	70	77.1
	Minimum	52	62	54	55	58	53	50	56	58	54	60	58	64	58	63	62	57	57	57	50	58	57	58	65	64	63	59	66	50	46	44	57.0
Wellsburg	Maximum	68	77	73	81	81	80	78	85	88	87	86	90	83	78	81	82	79	79	76	82	88	90	90	88	83	87	87	78	72	73	78	81.5
	Minimum	58	61	54	56	58	65	60	62	66	63	61	67	64	68	67	66	70	63	55	57	61	59	67	71	69	65	65	64	53	51	52	61.9
Weston§	Maximum	80	74	80	76	78	84	84	90	94	92	94	98	88	86	84	90	82	80	78	84	88	94	96	94	90	82	84	80	76	74	84	85.1
	Minimum	58	60	54	60	54	58	58	58	68	62	64	62	70	64	62	66	70	62	64	60	58	60	68	72	78	68	66	68	60	58	63.4	
Wheeling§	Maximum	68	83	81	86	88	89	84	89	94	93	93	98	84	81	81	85	83	85	81	88	84	94	97	95	86	90	91	83	79	75	84	86.2
	Minimum	52	60	55	56	59	57	61	59	62	63	59	62	67	71	68	62	69	62	55	58	60	59	59	60	70	64	66	65	55	49	50	60.5
Southern Section.																																	
Beckley	Maximum	95	82	84	82	81	80	82	88	89	88	85	91	89	80	82	83	81	85	84	85	81	86	89	88	89	88	89	85	76	75	82	84.3
	Minimum	60	54	54	54	52	60	51	67	67	50	57	57	59	60	60	68	67	60	51	51	57	61	62	65	61	54	62	54	46	54	48	57.5
Bluefield	Maximum	90	79	82	78	..	80	82	81	89	89	90	94	..	82	82	79	79	83	..	83	85	89	89	89	90	..	90	85	76	75	77	84.0
	Minimum	65	60	56	62	..	56	58	60	66	50	59	..	61	64	64	66	67	69	..	51	56	59	65	64	66	..	62	65	58	47	48	60.1
Charleston	Maximum	83	88	89	87	89	90	89	96	93	96	97	100	96	86	85	83	85	87	80	86	87	93	94	92	94	88	90	87	80	80	82	88.8
	Minimum	57	67	58	60	64	53	59	60	65	64	63	65	73	68	67	68	72	71	60	56	61	67	64	68	70	72	67	67	58	54	53	63.7
Elkhorn	Maximum	88	85	84	83	85	83	83	90	89	89	95	92	85	81	80	81	84	80	87	87	90	92	90	93	93	88	88	80	76	78	86.1	
	Minimum	64	61	57	60	55	54	56	59	65	58	59	62	68	67	64	66	68	68	58	50	52	56	63	60	64	65	63	58	56	48	48	59.7
Green Sulphur Spgs.	Maximum	83	83	86	80	85	85	85	95	94	93	96	98	94	86	84	81	78	84	80	85	87	91	92	91	93	86	88	85	78	76	79	86.5
	Minimum	53	63	52	55	59	52	59	55	59	60	56	58	64	64	65	64	68	67	55	48	54	55	58	60	62	63	63	52	52	45	43	57.5
Hinton§	Maximum	88	84	87	83	88	87	90	95	90	94	96	99	98	85	85	88	78	88	87	89	90	94	96	94	95	93	92	89	80	79	80	89.1
	Minimum	59	63	58	60	63	57	59	58	63	92	62	62	68	67	66	67	69	68	60	56	61	62	62	64	67	67	65	66	62	51	49	62.0
Holcomb§	Maximum	86	81	83	85	82	83	85	94	89	89	93	95	89	84	83	80	76	83	74	86	86	91	91	89	90	92	89	83	75	75	78	85.1
	Minimum	49	61	48	59	57	60	51	53	56	44	55	54	61	61	61	60	64	65	66	45	50	51	54	57	60	61	64	60	52	43	40	55.5
Huntington§	Maximum	79	88	88	90	91	90	92	98	96	96	98	104	95	88	87	89	89	88	84	61	92	96	96	97	98	87	94	87	81	83	80	90.7
	Minimum	61	66	58	62	65	60	60	60	64	68	64	66	75	68	68	70	73	70	62	58	63	65	61	70	72	71	67	69	62	54	54	64.7
Lewisburg	Maximum	84	81	84	79	85	82	85	89	88	91	91	95	92	83	84	79	78	82	76	83	85	90	89	88	89	87	88	83	74	73	75	84.3
	Minimum	53	64	51	58	61	52	55	54	57	56	59	57	66	64	64	53	67	67	56	49	53	56	58	61	62	62	63	61	56	45	43	57.5
Madison§	Maximum	85	90	90	90	92	92	90	97	98	98	100	104	100	87	87	83	86	88	81	89	90	95	96	95	96	84	92	92	81	80	..	90.9
	Minimum	56	60	58	56	59	55	55	57	60	62	62	63	69	68	67	67	69	71	60	56	56	60	65	65	68	67	67	67	56	54	51	61.5
Marlinton	Maximum	78	75	80	72	77	75	77	80	80	85	86	89	84	75	78	75	74	79	74	80	84	87	85	84	86	73	82	79	69	68	74	78.9
	Minimum	44	56	50	51	56	54	48	52	55	54	54	49	57	60	60	58	61	58	50	43	48	48	52	56	54	60	62	60	45	40	40	52.7
Point Pleasant	Maximum	75	90	90	92	93	93	95	100	101	100	103	106	100	90	87	87	90	90	86	93	96	99	100	100	101	92	94	90	84	86	87	93.2
	Minimum	56	60	54	56	58	58	56	57	61	65	63	62	62	66	69	68	70	62	55	56	61	60	60	73	69	69	65	68	55	49	47	61.3
Powellton	Maximum	90	89	90	87	90	92	90	98	97	97	99	100	97	87	84	82	83	98	81	89	90	96	93	94	95	85	91	87	80	79	82	89.6
	Minimum	58	56	55	57	61	53	51	56	63	60	60	63	66	62	66	66	70	68	60	51	55	58	61	63	64	66	65	66	56	49	47	59.7
Robertsburg§	Maximum	79	84	89	92	92	90	92	100	97	98	100	104	97	98	97	86	88	86	84	90	93	100	99	97	97	90	97	87	82	83	86	92.1
	Minimum	53	61	53	57	58	56	55	55	60	65	61	62	72	67	66	67	70	38	58	54	60	60	57	70	67	70	60	67	60	58	47	61.1
Ryan	Maximum	92	85	87	90	90	90	96	95	93	98	97	90	85	84	83	83	86	92	86	88	95	98	93	93	89	89	85	79	79	83	89.1	
	Minimum	42	61	45	54	58	56	56	55	60	60	60	68	68	65	66	61	57	56	56	54	60	68	67	65	68	70	68	65	65	47	43	59.8
Spencer§	Maximum	79	86	81	90	89	90	88	96	95	95	92	90	88	81	83	84	87	83	84	85	86	88	94	93	95	86	87	84	78	79	80	87.0
	Minimum	54	61	51	51	54	50	56	55	62	58	54	62	60	66	66	66	66	67	53	57	56	55	56	68	65	69	62	56	54	46	45	58.1
Union§	Maximum	89	80	82	80	82	83	86	90	89	89	88	96	94	83	82	82	76	80	82	84	85	90	90	90	91	91	86	85	87	75	78	85.3
	Minimum	60	63	55	60	57	60	53	57	59	57	58	60	65	64	65	62	70	66	65	48	52	54	57	62	63	64	63	63	58	47	45	59.1
Williamson§	Maximum	81	83	84	85	85	86	86	91	88	89	92	97	94	85	82	79	81	85	77	85	86	91	92	90	92	86	91	83	76	76	78	85.7
	Minimum	53	61	59	59	60	56	55	56	60	61	61	62	67	66	65	68	67	69	60	55	56	62	62	62	65	68	67	66	58	52	49	60.9

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Total Precipitation. Inches. July. 1914.
No Rain
No Rain
No Rain
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

STACK

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

LIBRARY OF THE UNIVERSITY OF ILLINOIS OCT 1914

CLIMATOLOGICAL DATA

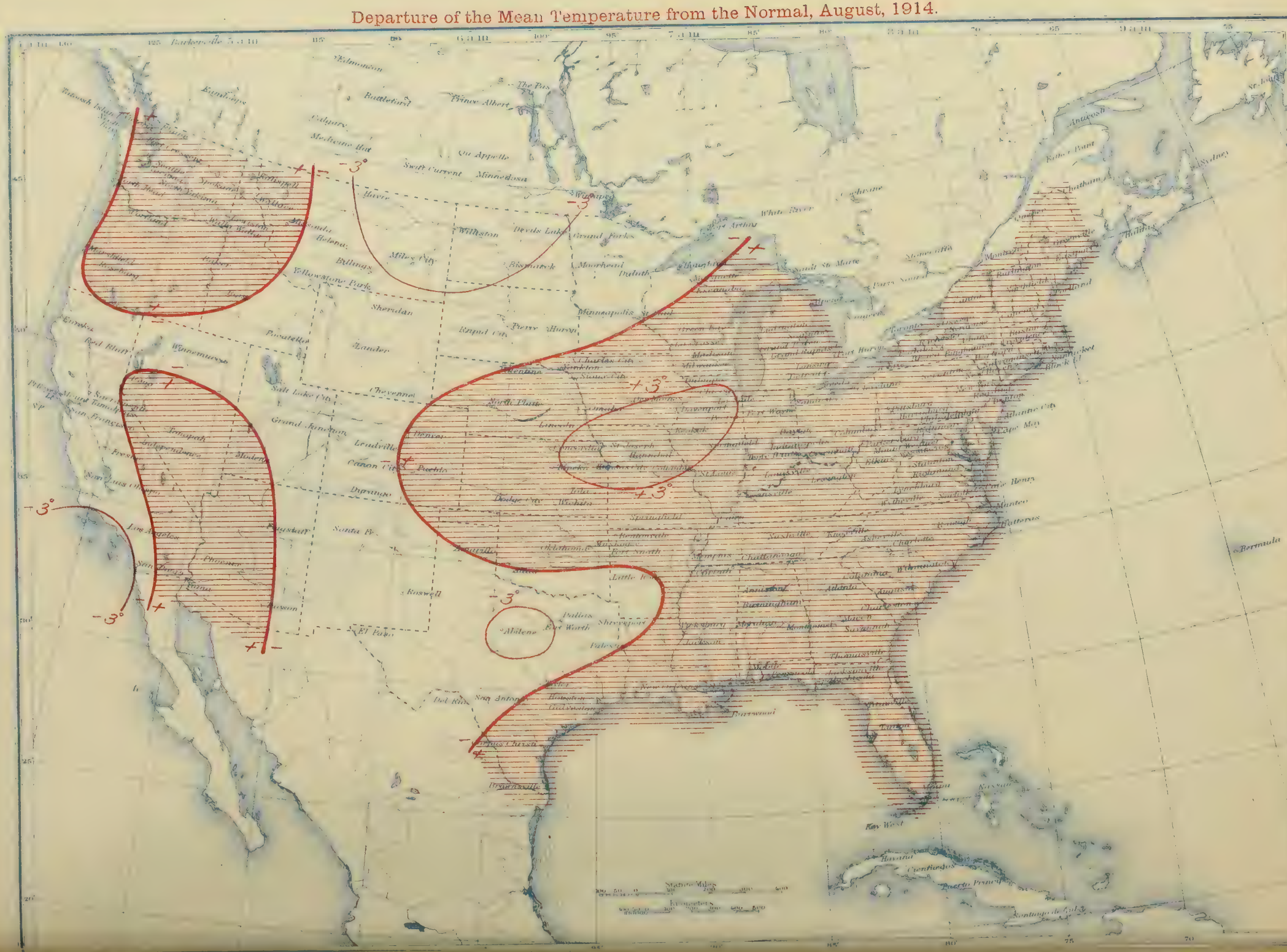
WEST VIRGINIA SECTION

AUGUST, 1914

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
SEPTEMBER 28, 1914

Departure of the Mean Temperature from the Normal, August, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXII. PARKERSBURG, W. VA., AUGUST, 1914. No. 8.

GENERAL SUMMARY.

While the temperatures for August averaged practically normal, the month was characterized by high temperatures on several days. The rainfall was considerably above the average, with favorable distribution over the State. As practically no rain was received until the 10th, a severe drought prevailed during the first decade. Good showers occurred at the beginning of the second decade, and the soil was well soaked by general rains during the last decade. Late crops and pastures were in good condition at the close of the month. The rivers and streams were low.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.04 and 30.06 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.19 inches on the 13th, and 29.86 inches on the 28th. Elkins, 30.23 inches on the 13th, and 29.87 inches on the 29th.

TEMPERATURE.

The monthly mean for the State, 46 stations reporting, was 71.8°. The mean departure from the normal for 39 stations having ten or more years of record was plus 0.1°. The month opened cool. While the day temperatures on the 1st were only slightly below the normal, the early morning readings were the lowest for the month in most sections, ranging generally from 40° to 60°. The temperatures continued slightly below the normal until the 5th. Moderately warm weather prevailed from the 6th to the 11th. The highest readings of the month occurred at a few stations during that period. The temperatures were somewhat below the normal from the 12th to the 17th, and the lowest readings of the month occurred at several stations on the 16th. Much warmer weather set in on the 18th and the temperatures were high on the 20th and 21st, ranging generally from 90° to 100°. Cool weather prevailed on the 25th. The temperatures were near the normal on the last six days.

HUMIDITY.

The average of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 79 per cent; 8 p. m., 64 per cent. The August averages for the same hours for the past 26 years are 82 and 69 per cent, respectively. Elkins, 8 a. m., 88 per cent; 8 p. m., 82 per cent. The August averages for Elkins for the same hours for the past 14 years are 91 and 82 per cent, respectively.

PRECIPITATION.

The average rainfall for the State, 56 stations reporting, was 4.86 inches. The mean departure from the normal for 47 stations having ten or more years of record was plus 1.24 inches. Although the rainfall was favorably distributed, the amounts were generally greater over the northern and central counties. Except in a few sections of the southern and central counties, no rain of consequence was received until the 9th. Drought conditions were severe. Light to moderate showers occurred in nearly all sections on the 11th and 12th. Scattered light showers also fell on the 14th, 15th, 20th, 21st, and 22d. Good rains occurred in most sections daily from the 24th to the 29th.

WIND.

The average velocity of the wind at Parkersburg was 4.4 miles per hour, or 0.2 of a mile above the August average for the past 24 years. The average at Elkins was 2.4 miles per hour, or 0.3 of a mile below the August average for the past 15 years. The highest velocity at Parkersburg was 20 miles per hour from the northwest on the 29th, and at Elkins 13 miles per hour from the west on the 23d.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 53 per cent of the possible amount, or 4 per cent below the August average for 17 years. The average at Elkins was 52 per cent, or 1 per cent above the August average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 13th, 15th, 16th, 17th, 18th, 19th, 20th, 23d, 24th, and 30th; Elkins, 5th, 6th, 8th, 9th, 13th, 14th, 15th, 16th, 17th, 18th, 20th, 27th, and 31st; Grafton, 1st, 2d, 4th, 5th, 6th, 7th, 8th, 9th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 22d, 23d, and 24th; Mannington, 3d, 4th, 5th, 6th, 7th, 13th, 14th, 15th, 16th, 20th, 22d, 23d, 26th, 27th, 30th, and 31st; Parkersburg, 27th; Robertsburg, 17th; Rowlesburg, 2d, 14th, 15th, 17th, 22d, 26th, 28th, 31st.

Hail: Fairmont, 2d; Holcomb, 4th; Wheeling, 14th.

Haze, light: Bayard, 4th and 5th.

Thunderstorms (Dates and number of stations reporting): 2d, 4; 4th, 3; 6th, 3; 7th, 7; 8th, 5; 9th, 7; 10th, 9; 11th, 5; 12th, 2; 13th, 1; 14th, 2; 15th, 3; 16th, 1; 20th, 5; 21st, 8; 22d, 1; 24th, 10; 25th, 5; 26th, 1; 27th, 1; 28th, 6; 29th, 3.

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature.			Precipitation.
	Mean.	Highest.	Lowest.	
1891	69.8	..	..	5.48
1892	72.1	96	41	2.55
1893	70.8	98	41	3.38
1894	71.5	103	38	2.07
1895	73.3	104	40	3.01
1896	72.6	97	40	2.82
1897	70.9	100	42	2.91
1898	73.7	96	44	7.51
1899	73.5	100	34	2.64
1900	76.0	100	45	3.15
1901	73.6	98	43	5.14
1902	70.4	98	35	2.40
1903	71.4	105	38	2.64
1904	70.7	95	32	2.88
1905	71.3	96	40	4.25
1906	75.4	98	47	5.15
1907	69.4	93	41	4.64
1908	70.9	101	37	2.82
1909	70.8	99	37	3.03
1910	70.8	98	39	2.03
1911	73.5	105	40	6.71
1912	69.3	95	35	3.64
1913	72.7	102	37	3.18
1914	71.8	100	40	4.86
Entire period	71.9	105	32	3.70

Climatological Data for August, 1914.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard [a]	Grant	2,500	12	66.6	+0.9	91	20	40	16	42	6.04	+1.71	1.62	0	10	18	5	7	w.	Solomon Clark
Burlington	Mineral	875	20	70.2	-1.0	94	22	48	26	39	4.80	+1.36	1.35	0	8	8	15	8	w.	J. W. Vandiver
Franklin	Pendleton	641	8	65.4	.....	86	23	47	16	32	3.60	.....	0.80	0	9	13	9	9	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	4.68	+1.06	1.54	0	10	.....	.....	.....	w.	S. W. Lightner
Lost City	Hardy	.....	8	67.8	.....	88	20	45	18	41	2.51	.....	0.83	0	8	1	25	5	w.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	74.6	+1.6	100	19†	52	1	37	4.58	+0.93	1.45	0	10	17	9	5	s.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John C. Fisher
Romney	Hampshire	824	17	71.8	-0.9	100	20	50	16	42	3.13	-0.05	0.87	0	8	.....	.....	.....	.....	Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	71.0	-0.1	96	20	46	16	42	1.38	-2.63	0.63	0	6	3	19	9	w.	J. M. Mallow
Averages and	Extremes	.....	....	69.6	+0.1	100	19†	40	16	42	3.84	+0.40	1.62	0	9	10	14	7	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	74.2	+0.3	95	20	56	1†	32	9.29	+5.70	2.62	0	9	21	4	6	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	5.31	.....	2.00	0	8	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	69.8	-0.4	90	8	48	1†	34	6.57	+2.82	1.80	0	10	23	2	6	.....	H. A. Darnall
Cairo	Ritchie	674	12	74.8	+1.8	97	21	50	16	37	6.09	+2.77	1.43	0	12	5	21	5	.....	Van A. Zevely
Central Station	Doddridge	950	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. W. Sherwood
Cheat Bridge	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	5.14	.....	1.98	0	7	.....	.....	.....	.....	Franz A. Degler
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	3.48	.....	1.27	0	6	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	74.8	+1.7	99	8†	50	22	40	4.77	+1.78	1.31	0	11	12	10	9	sw.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	3.71	.....	0.72	0	11	20	2	9	sw.	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	3.76	.....	1.20	0	8	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	69.6	+0.2	90	20	47	1	35	4.96	+1.31	1.49	0	13	10	14	7	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	73.6	+1.0	97	20	51	16	38	5.92	+2.62	2.70	0	12	21	3	7	w.	F. P. Hall
Glenville	Gilmer	738	25	73.2	-0.2	97	20	46	3	42	4.87	+0.97	1.78	0	9	14	15	2	sw.	Joe N. Craddock
Grafton	Taylor	1,000	22	71.6	0.0	96	7†	49	1	41	5.13	+1.25	1.56	0	9	19	9	3	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	69.2	-1.6	92	8	41	1	42	4.98	+0.94	1.52	0	7	20	4	7	w.	Allen Smith
Mannington	Marion	974	12	70.4	-0.8	92	20	49	16	36	6.22	+2.95	1.71	0	15	18	5	8	sw.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	73.0[e]	+0.8	93 [a]	8†	51 [c]	11	32[d]	5.07	+1.00	1.71	0	6	10	16	5	.....	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. L. Brown
New Cumberland	Hancock	987	15	72.6	+1.9	96	6†	48	13	37	2.90	-0.31	0.80	0	9	7	13	11	s.	Frank S. Evans
New Martinsville	Wetzel	634	21	75.0	+0.9	96	19	53	16	38	5.90	+3.05	1.45	0	10	10	12	9	s.	Wm. Ankrom
Osceola	Randolph	3,600	0	.....	.....	.....	.....	.....	.....	.....	4.30	.....	1.20	0	9	.....	.....	.....	w.	A. T. Dohmer
Parkersburg	Wood	638	26	74.9	+1.6	97	20	57	16	35	5.05	+1.52	1.47	0	12	11	10	10	se.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	68.7	-0.5	89	9†	46	1	35	4.83	+1.21	1.25	0	10	16	10	5	.....	J. W. Swisher
Philippi	Barbour	1,149	22	72.5	+0.8	98	9	49	16	38	5.65	+1.75	1.48	0	12	19	6	6	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	67.0	0.0	84	20	47	23	35	6.27	+1.38	2.56	0	12	22	5	4	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	5.71	+1.94	1.40	0	10	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	7.36	.....	1.85	0	9	.....	.....	.....	.....	J. O. Goodman
Smithfield	Wetzel	835	10	71.6[e]	.....	97 [b]	20	41 [b]	26	40[d]	6.01	+2.25	3.00	0	11	12	12	7	ne.	G. M. Whisler
Terra Alta *	Preston	2,612	14	70.5	+2.8	90	20	53	28	32	7.53	+2.66	1.70	0	....	19[b]	1[b]	9[b]	.....	H. N. Cuppett
Wellsburg	Brooke	1,225	20	71.6	+1.6	91	8†	53	4	27	4.45	+0.91	1.50	0	8	16	9	6	w.	C. P. Waugh
Weston	Lewis	1,026	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss C. M. Davis
Wheeling	Ohio	645	30	73.0	.....	97	20	50	16	38	4.32	+0.87	1.85	0	13	20	3	8	s.	Miss M. B. Forsyth
Averages and	Extremes	.....	.....	72.1	+0.5	99	8†	41	1†	42	5.29	+1.84	3.00	0	10	15	9	7	w.	
Southern Section.																				
Bancroft [a]	Putnam	574	11	.....	.....	.....	.....	.....	54	1	....	7.18	+2.51	4.00	0	10	11	0	19	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	70.6	+1.1	90	19†	40	16†	41	4.40	+1.58	1.18	0	7	21	6	4	w.	John A. Ewart
Bluefield	Mercer	2,558	20	72.0[f]	+0.6	92 [f]	20	50 [f]	1	34[f]	3.62	-0.46	1.26	0	11	11[b]	14[b]	4[b]	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	75.1	-0.4	95	19†	53	23	39	5.01	+0.72	1.63	0	11	17	6	8	w.	R. C. Hewes
Cuba *	Jackson	650	14	72.8	+0.9	96	20	51	16	44	3.56	+0.65	1.18	0	10	4	26	1	w.	C. T. Perry
Doane	Wayne	717	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	19	9	3	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	71.5	+0.3	93	20	52	16	37	5.55	+1.91	1.01	0	14	6	23	2	w.	J. J. Lincoln
Green Sulphur Spgs	Summers	1,600	19	71.6	0.0	94	20	46	1	43	4.24	+1.22	1.00	0	15	12	15	4	w.	Arthur George
Hinton	do	1,450	25	74.2	+0.1	97	20	50	1	38	4.47	+0.81	1.85	0	13	15	1	15	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	69.4	.....	93	20	40	1	44	7.51	.....	.....	0	14	14	5	12	.....	R. E. Ferguson
Huntington	Cabell	538	19	75.4	+0.7	96	20	52	1	38	4.68	+1.08	1.80	0	10	17	5	9	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	69.8	-0.2	90	20	46	1	38	3.26	-0.12	0.83	0	9	26	3	2	nw.	Geo. T. Argabrite
Logan	Logan	687	12	75.3	+1.2	90	20	60	2†	25	4.21	+0.58	1.17	0	7	19	8	4	e.	Dr. J. E. McDonald
Madison *	Boone	704	9	74.3[b]	.....	96 [b]	20	50 [a]	2	40[c]	4.42	.....	1.52	0	13	13	9[c]	7[b]	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	65.6	-2.5	86	20	40	1	42	5.22	+0.83	0.90	0	16	12	17	2	.....	C. J. McCarty
Nuttallburg [b]	Fayette	2,252	22	66.2	.....	83	19	50	1	27	4.49	+1.28	1.30	0	7	11	10	2	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	75.6	+0.7	100	20	53	16	41	3.46	+0.24	1.12	0	9	13	9	9	se.	W. D. Holmes
Powellton [b]	Fayette	933	17	74.0	-1.3	97	20	47	1	36	6.16	+2.58	1.00	0	15	12	9	8	.....	Morris Hansford
Princeton	Mercer	2,395	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Scott
Robertsburg	Putnam	574	14	75.4	+0.8	99	20†	51	16	39	2.91	-0.50	0.97	0	10	17	0	14	s.	E. C. Brace
Ryan	Roane	700	11	72.9	+1.1	94	22	49	1†	40	5.76	+1.78	1.70	0	8	18	7	6	.....	Wm. E. Ryan
Spencer *	do	784	16	72.4	.....	94	20	50	16	41	4.80	+1.52	3.31	0	6	13	15	3	.....	A. M. McKown
Sutton	Braxton	839	11	74.2[k]	.....	96 [k]	20	48 [k]	1	41[g]	4.54	+0.73	.....	0	....	12[e]	9[e]	5[e]	.....	Ben Gillespie
Union	Monroe	2,250	10	71.4	+0.7	96	20	49	1†	43	2.51	1.12	0.94	0	8	.....	.....	.....	.....	Shelton Clark
Williamson	Mingo	660	13	72.7	-2.6	91	20	49	1	34	4.52	[b]1.14	1.36	0	15	15	8	8	w.	J. F. Keyser
Averages and	Extremes	.....	.....	72.3	+0.2	100	20	40	1†	44	4.68	+0.88	4.00	0	11	15	9	7	w.	
State Averages and	Extremes	.....	.....	71.8	+0.3	100	19†	40	1†	44	4.86	+1.24	4.00	0	10	15	9	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for August, 1914.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac	T.	.05					T.		.17	.35	1.50	T.												.12	1.62		.58	.68	.93	.04		6.04
Burlington	do						T.	.65	T.	T.	.85	.45	.77													1.35	.35	.20	.18				4.80
Franklin	do				.60			T.		T.	.20	.40	.20									.20			T.	.80	.80	.30	.10				3.60
Harpers Ferry	do		T.							.50		.10	1.54	.50								.15	.10		.65	.42		T.	.60	.12		4.68
Lost City	do										.10	.75	.16		.06	.20								.05	.36			.83				2.51
Martinsburg	do	.05	.07					.13	T.		.40	.15	.50								.13		T.		.35		1.35		1.45				4.58
Moorefield	do																																
Romney	do	.16									.18	.83										.13			.13	.87	.43		.40				3.13
Upper Tract	do							T.		T.	.08	.20										.08			T.	.20	.63			.23			1.38
Northern Section.																																	
Bens Run	Ohio									.87	.75	.89	1.24									.60			.12	1.53		2.62	.67				9.29
Brandonville	Monongahela			.32					.06		.55		1.82	.17											2.00	.06	.33						5.31
Buckhannon	do									T.	.42	1.80	1.24			.50						.25			.73	.32	.10		.68	.53			6.57
Cairo	Little Kanawha									.02	.86	.64	1.43			.95							.10		.06	.66	.68	.02	.12	.55			6.09
Central Station	Middle Is. Creek																																
Cheat Bridge	Monongahela					T.	T.	T.					T.	1.50							T.	.20				.66	1.98	.12	.30	.38			5.14
Cortland	do												.54	.39		1.27										.21			.82	.25			3.48
Creston	Little Kanawha										.30	T.	1.30	.40		.03							.48		.06	1.25	.70		.10	.10	.05	T.	4.77
Davis	Monongahela										.13	.33	.55	.28		.04									.06	.72	.58		.02	.55	.45		3.71
Elizabeth	Little Kanawha										.38	.32	1.20		.47							.17				.84			.18	.20			3.76
Elkins***	Monongahela									.01	.06	.60	.77		.23	.61						.03			1.49	.20	.05		.14	.72	.05		4.96
Fairmont	do			.20							.25	.17	.91	.58		.29							.02		.01	2.70	.16		.35	.28			5.92
Glenville	Little Kanawha										.52		1.78	.37									.42			.43	.68	.12	.43		.12		4.87
Grafton	Monongahela									.10		1.10	.90	.03								.52				1.56	.09		.68	.15			5.13
Lost Creek	do		T.								.55	1.52	.56									.12		1.16	.62				.45	T.			4.98
Mannington	do		.04	.30				T.		.02	.39	1.07	.51		.02	1.23						.26			.01	1.71	.01		.35	.29	.01		6.22
Morgantown	do										.44	1.47	.60										T.			1.71			.55	.30			5.07
Moundsville	Ohio																																
New Cumberland	do		T.	T.					.40		.10	.30	.10		T.			T.		T.	.10	.20			.40				.50	.80			2.90
New Martinsville	do								.12	.85	.30	1.23	.65		.20							.18				.40			.52	1.45			5.90
Osceola	Monongahela								.10		.20		.90	.50									.10			.20	1.20	.80	.30				4.30
Parkersburg ****	Ohio		T.			.01	.01	.08	.33	.82	.93	.54		T.								.13			.01	1.13			.23	.83			5.05
Parsons	Monongahela		.06							.20	.50	.40	.90										.15			.52	.65			1.25	.20		4.83
Philippi	do		T.							.03	.09	1.48	.58			.64						.17		T.	.56	.77	.11		1.03	.08	.11		5.65
Pickens	do		.57				.06			T.	.06	1.07	.57			.27						.06				* 2.56			.14	.36	.55		6.27
Rowlesburg	do									1.12	.04	1.02	.42			.02							.20			1.40	.65			.78	.06		5.71
Saint Marys	Ohio					.05					.55	.36	1.60			.65										1.85		.65		1.00	.65		7.36
Smithfield	Fishing Creek		.10								.28	.61				.78							.16	.01		2.77	.23		.13	.65	.26		6.01
Terra Alta	Monongahela										1.70	.70	.93									1.70			.80	1.10			.50	.10			7.53
Wellsburg	Ohio			.03							.15	1.50	.12									1.25			.17				.20	1.03			4.45
Weston	Monongahela																																
Wheeling	Ohio			.01							.21	.12	1.09	.05		.37						.13	.26		.01	.01	.01		T	1.85	.20		4.32
Southern Section.																																	
Bancroft	Great Kanawha									.20	.19	.02	4.00		.05								.30			.60	.92		.82	.08			7.18
Beckley	do									.83		.78	.25		.10										.76		1.18		.50				4.40
Bluefield	do								.10	.20			.04		.21						.05	.06			.20	.65	.65	1.26		.20			3.62
Charleston	do										.16	.08	1.25	.38	.08	.10							.50			.21	.87		1.28	.10			5.01
Cuba	Sand Creek		.04			.03	T.	T.	T.	T.		.27	.91										.10	.32	T.	.31	1.05			.28	.25			3.56
Doane	Big Sandy																																
Elkhorn	do		.09	.94		T.				.23		.33	.25	.26	.10								.20			.41	.86	1.01	.22	.02	.63			5.55
Green Sulphur Spgs.	Great Kanawha			.19				T.		.01	.43	.09	.14			.09						.91	.09			.01	.75	.77	.06	.27	.42	.01		4.24
Hinton	do					1.85					.34	.02	.08	.06									.12	.10		.22	.40	.58	.40	.06	.24			4.47
Holcomb	do			1.15		.24	.06			*	*	*	1.66		.11							1.05	T.			.85	*	1.67		*	.72			7.51
Huntington	Ohio										.10	T.	1.76	.04	.66								.74			.64	.38		.02	.28	.06			4.68
Lewisburg	Great Kanawha				.07			.10		.83	T.	T.	T.										.19			.66	.20	.52		.08	.61			3.26
Logan	Guyandotte						T.	T.	T	.35	.18	.54		.65									T.			1.17	.83	.49	T.	T.				4.21
Madison	Great Kanawha			.03						.05	.54	.33	.68	.05	.10	.31									.17		1.52			.45	.17	.02		4.42
Marlinton	do				.84	.01	.90	.04		.09	.59	.63	.07			.14						.05	.09			.07	.25	.86		.54	.05			5.22
Nuttallburg	do								.24			1.30										T.	.40			.50	1.10	.35	T.		.60			4.49
Point Pleasant	Ohio								.04		.12	.20	1.06	.06												.72	.94		.08	.24			3.46
Powellton	Great Kanawha									.11	1.00	.60	.16		.67	.57						.06	.20			.42	.57	.46	.54	.31	.42	.07		6.16
Princeton	do																																
Robertsburg	do			.60							.05		.97	.07	.05								.15			.50	.25		.15	.12			2.91
Ryan	do		T				T.			T.	1.46	1.70	.49									.29			1.05	.02			.65	.10			5.76
Spencer	Little Kanawha									.20	T	3.31	.22										.22			.65	.20							4.80
Sutton	Great Kanawha					T.					1.42	.15	.13	.14												*	*	*	*	2.10	.10	.50		4.54
Union	do										.19	.40	.15	.12														.94	.24	.37	.10			2.51
Williamson	Big Sandy								.08	.04	.10	.12	1.00	.36	.10	.94							.08			.80	.38	.08	.36	.02	.06			4.52

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T Trace, or less than 0.01 inch.

Daily Temperatures for August, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	79	79	79	78	80	85	90	87	88	83	83	73	80	80	78	82	81	87	89	91	84	85	85	85	72	..	79	74	79	75	81	81.7
	Minimum	42	47	49	49	49	50	51	54	50	62	58	60	50	44	59	40	46	48	53	51	52	51	46	59	54	..	53	49	60	57	51	51.5
Burlington	Maximum	82	84	81	81	82	89	90	91	91	87	85	74	81	83	83	83	85	90	92	93	90	94	90	80	82	75	82	84	82	85	88	85.1
	Minimum	52	53	56	52	56	54	55	60	61	62	66	61	57	52	59	49	52	55	59	59	62	61	51	49	52	48	50	52	50	56	51	55.2
Lost City	Maximum	76	77	78	76	76	80	83	85	86	81	84	75	76	75	77	80	76	86	87	88	84	80	86	84	75	68	66	76	80	75	78	79.1
	Minimum	50	52	53	57	55	53	54	54	56	66	62	66	52	48	50	64	48	45	58	60	62	56	67	63	58	54	57	56	58	61	54	56.4
Martinsburg§	Maximum	85	85	82	84	83	85	94	97	98	90	87	78	85	87	84	89	88	97	100	100	89	90	96	94	74	70	74	72	90	83	87	87.0
	Minimum	52	59	63	60	60	60	61	64	66	72	70	69	61	57	60	55	59	62	65	68	69	65	59	64	57	56	60	64	67	65	62	62.3
Romney	Maximum	84	86	80	81	81	87	95	96	93	85	88	74	80	84	84	85	85	90	95	100	95	85	92	92	75	70	71	74	86	79	84	85.0
	Minimum	53	54	57	53	65	55	58	61	63	67	70	65	56	51	63	50	54	56	60	58	64	57	55	61	55	57	60	61	66	58	56	58.7
Upper Tract	Maximum	82	85	85	80	80	87	90	90	90	89	90	76	82	85	83	87	89	93	95	96	91	92	91	90	88	73	73	74	79	87	86	85.7
	Minimum	49	55	53	60	50	52	55	58	58	67	63	66	51	52	58	46	49	51	56	59	63	55	55	63	57	50	59	58	63	56	55	56.2
Northern Section.																																	
Bens Run	Maximum	47	85	87	89	92	92	91	93	88	85	78	77	83	85	83	85	87	91	93	95	80	85	91	83	72	42	86	76	78	79	84	85.2
	Minimum	56	63	60	59	60	69	66	65	67	68	69	62	67	60	62	56	60	63	65	67	69	59	59	71	62	60	62	67	66	59	59	63.1
Buckhannon	Maximum	82	82	82	83	85	85	89	90	88	85	85	72	78	81	80	80	84	86	88	89	85	82	87	86	77	78	32	82	82	78	81	83.0
	Minimum	48	56	53	52	52	52	58	58	60	65	66	61	52	51	60	48	51	53	55	59	64	62	53	53	63	61	58	54	65	56	54	56.5
Central Station	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Creston	Maximum	91	87	90	94	94	93	94	99	94	90	83	72	85	88	88	88	91	94	97	99	99	90	95	90	73	86	89	87	85	85	89	89.6
	Minimum	51	57	58	54	56	60	61	60	64	68	91	62	58	56	62	51	54	58	60	63	65	50	56	68	66	63	59	68	67	59	58	60.1
Elkins	Maximum	80	80	81	80	81	87	86	90	88	83	83	71	80	80	78	82	82	88	89	90	82	83	86	84	76	79	83	82	80	74	81	82.2
	Minimum	47	55	53	55	53	54	56	58	59	65	67	57	54	53	55	48	51	53	56	58	62	58	53	65	62	60	61	64	63	57	54	57.0
Fairmont§	Maximum	87	86	85	91	92	93	93	96	93	87	80	80	88	86	87	88	86	91	95	97	85	42	94	89	70	86	90	81	81	82	86	87.6
	Minimum	53	59	58	55	56	59	62	63	63	67	69	63	56	55	59	51	56	56	61	63	66	57	56	64	61	59	58	59	66	56	57	59.5
Glenville	Maximum	85	90	86	91	93	95	95	93	94	90	90	88	86	88	86	87	90	95	96	97	90	89	94	88	86	85	85	84	88	87	88	89.6
	Minimum	49	48	46	50	52	54	55	54	55	63	62	62	61	59	60	53	56	58	59	58	56	54	58	56	63	63	61	59	58	59	59	56.8
Grafton	Maximum	84	80	78	84	89	92	96	96	96	92	88	73	84	84	83	85	86	86	91	90	86	87	93	93	75	84	84	73	75	79	78	85.3
	Minimum	49	51	52	53	55	56	56	60	62	65	63	63	59	54	55	50	55	52	58	61	64	59	52	65	64	61	68	63	64	56	56	57.8
Lost Creek	Maximum	83	82	82	84	86	88	90	92	90	90	76	69	81	82	81	83	83	87	90	91	84	86	84	76	77	86	85	79	79	76	82	83.4
	Minimum	41	56	52	49	50	52	55	59	59	58	65	60	56	50	52	45	48	54	55	57	57	58	60	61	57	57	57	62	64	51	53	55.1
Mannington	Maximum	84	84	80	83	84	87	89	91	88	83	80	72	81	82	79	82	82	88	90	92	85	81	89	84	73	77	83	75	78	77	82	82.7
	Minimum	50	58	60	54	54	56	55	60	60	66	67	63	54	54	54	49	55	57	59	62	63	55	53	66	62	57	57	64	65	55	56	58.2
Morgantown	Maximum	84	85	..	82	83	89	89	93	85	84	83	71	84	86	80	84	85	89	92	93	88	85	90	83	73	89	86	76	81	78	83	84.3
	Minimum	56	67	59	56	63	63	69	65	66	67	51	..	..	..	59	53	58	64	65	66	67	57	58	69	60	59	59	65	68	57	62	61.7
New Cumberland	Maximum	83	82	80	83	85	96	94	96	90	86	75	79	85	90	82	82	87	95	96	96	81	85	93	80	75	80	86	75	79	81	85	85.2
	Minimum	56	58	58	51	54	65	64	67	68	68	68	58	48	58	54	50	65	65	67	65	61	53	60	64	57	53	53	60	63	63	67	60.0
New Martinsville	Maximum	88	85	86	89	92	94	93	94	91	86	83	79	84	86	85	86	88	93	96	95	85	87	94	89	75	85	90	90	79	81	87	87.6
	Minimum	65	68	71	62	58	58	61	64	65	68	71	62	58	58	61	53	59	61	63	65	69	59	56	70	62	59	62	65	67	58	59	62.5
Parkersburg	Maximum	89	87	83	86	88	90	92	94	86	87	78	77	82	87	82	87	89	93	94	97	81	85	94	85	70	82	87	78	77	81	85	85.6
	Minimum	58	66	61	61	63	68	72	66	70	70	70	62	59	62	62	57	58	65	67	69	69	63	59	70	63	60	61	69	64	62	64	64.2
Parsons	Maximum	78	79	81	80	80	84	87	86	89	87	83	78	76	78	79	73	81	84	87	89	81	86	84	85	83	77	79	82	81	82	74	81.9
	Minimum	46	49	57	52	55	53	52	54	56	60	60	58	59	57	52	60	48	51	54	58	61	55	54	51	61	59	60	56	57	58	57	55.5
Philippi	Maximum	86	85	83	89	89	90	92	93	98	88	81	70	84	83	85	84	83	90	91	92	85	86	89	85	70	80	86	80	81	78	80	85.0
	Minimum	50	57	57	57	58	67	73	63	60	66	66	55	57	59	61	49	51	55	59	60	63	57	64	67	63	60	58	64	66	56	61	60.0
Pickens	Maximum	77	77	79	74	77	80	82	82	80	77	76	69	73	75	72	76	78	82	82	84	79	76	82	80	81	76	77	76	72	71	75	77.3
	Minimum	58	57	54	57	57	56	59	59	60	64	65	66	51	52	55	48	51	54	59	62	61	59	47	49	56	56	61	64	56	52	51	56.6
Wellsburg	Maximum	81	83	77	80	84	87	87	91	87	83	78	75	79	81	77	81	85	89	90	91	77	79	86	82	68	76	81	74	76	76	79	81.3
	Minimum	69	62	58	53	60	66	71	69	68	67	67	57	56	59	59	56	65	67	67	66	64	57	59	66	58	54	58	63	64	56	62	62.0
Weston§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Wheeling§	Maximum	88	86	85	85	87	91	91	95	88	84	95	78	85	85	84	88	84	91	96	97	80	87	92	80	70	83	86	70	78	81	84	85.6
	Minimum	54	59	59	55	57	59	61	65	67	69	69	63	55	56	59	50	58	63	64	67	69	57	58	61	61	58	58	61	65	56	57	60.3
Southern Section.																																	
Beckley	Maximum	85	86	84	85	80	85	86	86	88	88	85	85	85	85	84	76	76	75	90	88	90	85	88	86	85	84	85	82	85	86	84	84.6
	Minimum	55	56	50	46	57	57	60	60	63	62	49	65	64	65	64	40	41	40	49	50	59	62	64	53	62	66	66	60	54	57	50	56.6
Bluefield	Maximum	83	..	82	82	81	81	86	85	..	85	83	80	80	75	80	..	86	88	90	92	85	85	..	89	85	76	..	83	80	..	80	83.3
	Minimum	50	..	58	57	59	59	59	62	..	64	65	67	57	59	61	..	52	55	61	64	64	63	..	63	63	66	..	65	67	..	54	60.6
Charleston	Maximum	86	88	88	88	88	89	90	94	89	87	86	75	82	83	82	95	89	92	95	95	87	85	92	89	85	82	86	86	83	81	84	86.8
	Minimum	55	60	58	58	60	63	65	67	68	70	70	66	62	60	65	56	57	59	63	65	68	65	53	70	68	68	68	68	70	61	60	63.4
Elkhorn	Maximum	81	85	84	80	80	84	85	86	86	82	84	80	76	80	80	84	86	88	90	93	85	84	89	84	80	77	74	82	79	76	82	82.8
	Minimum	56	60	59	58	58	60	59	60	60	61	65	65	57	57	56	52	56	55	59	56	56	65	63	65	63	67	67	66	66	64	56	60.2
Green Sulphur Spgs.	Maximum	85	88	85	85	82	85	89	90	87	83	86	89	80	79	83	85	89	92	92	94	86	87	90	87	85	75	80	82	83	77	84	85.0
	Minimum	46	49	52	54	55	53	55	53	64	65	62	65	57	54	60	60	48	49	55	60	66	61	58	60	65	66	66	64	63	61	54	58.2
Hinton§	Maximum	88	90	91	88	82	84	89	90	90	85	88	81	80	81	87	88	92	93	94	97	91	89	94	90	88	75	80	84	83	78	87	87.0
	Minimum	50	55	58	58	61	60	61	63	64	67	66	67	60	59	60	55	54	55	59	64	67	64	61	63	67	68	67	66	65	63	59	61.5
Holcomb§	Maximum	84	84	83	83	82	86	83	84	88	84	85	71	82	81	85	72	87	90	91	93	85	89	90	85	84	80	85	83	82	80	83	84.2
	Minimum	40	50	49	51	53	52	54	51	55	57	59	60	51	50	56	54	45	47	52	56	58	59	60	55	61	65	60	63	61	57	51	54.6
Huntington§	Maximum	90	86	90	91	90	91	88	91	86	89	77	76	85	87	86	86	90	92	95	96	85	87	93	85	75	84	76	83	80	80	85	86.3
	Minimum	52	58	64	60	62	68	67	67	70	71	73	68	62	64	64	55	57	61	64	67	60	63	62	68	69	67	65	67	72	60	60	64.4
Lewisburg	Maximum	80	84	84	79	77	85	85	87	85	82	85	76	77	77	79	81	85	87	89	90	86	83	87	83	82	76	77	80	81	75	80	82.1
	Minimum	46	51	53	59	55	52	54	58	62	66	62	66	55	55	58	48	47	49	55	61	63	56	58	59	64	67	64	64	62	60	53	57.5
Logan	Maximum	85	83	84	85	86	88	88	89	86	89	85	81	79	82	84	83	84	88	88	90	87	85	84	88	86	84	82	85	80	82	81	85.0
	Minimum	63	60	64	64	66	65	64	64	68	69	67	64	63	64	67	68	60	64	65	67	69	68	70	69	69	68	64	66	65	64	66	65.6
Madison§	Maximum	88	90	89	89	91	92	93	92	90	89	80	75	85	83	84	90	92	93	95	96	90	88	..	75	73	72	86	83	70	82	..	86.0
	Minimum	52	50	54	60	59	62	63	65	67	69	68	70	62	62	62	56	57	57	61	64	66	67	61	..	65	69	69	70	68	66	61	62.6
Marlinton	Maximum	76	80	80	75	75	78	81	82	82	77	76	71	74	76	75	78	83	84	85	86	82	82	83	78	77	74	74	74	76	74	78	78.3
	Minimum	40	45	45	56	55	52	53	56	58	61	58	60	50	50	52	46	44	42	47	54	59	54	54	51	61	60	60	60	58	53	50	53.0
Point Pleasant	Maximum	94	91	93	92	94	96	96	96	89	92	84	78	86	90	88	90	93	96	99	100	91	91	98	88	72	87	91	90	80	85	87	90.2
	Minimum	54	59	57	57	55	64	66	63	67	69	71	60	58	59	58	53	54	60	63	64	64	56	57	69	64	60	53	68	68	55	59	60.9
Powellton	Maximum	83	87	86	89	89	09	92	90	90	88	90	74	88	82	83	..	88	91	..	97	89	88	93	90	86	82	86	88	84	83	85	87.2
	Minimum	47	54	52	56	57	59	60	61	64	67	65	71	59	57	61	..	59	55	..	66	65	63	60	61	66	70	65	64	66	62	55	60.8
Robertsburg§	Maximum	90	89	89	90	95	94	95	94	90	92	92	76	88	37	85	90	93	95	98	99	89	90	96	99	75	85	93	85	80	82	88	89.8
	Minimum	53	57	58	56	57	63	64	62	69	69	62	62	58	60	61	51	54	58	63	64	64	59	58	68	68	64	62	68	70	54	58	61.1
Ryan	Maximum	89	90	88	88	90	90	93	92	86	86	82	80	82	81	81	82	80	89	92	93	86	94	92	88	87	83	93	85	82	80	83	86.7
	Minimum	49	54	56	57	55	60	59	60	65	66	69	65	57	56	57	57	49	56	58	64	64	56	55	64	63	62	60	68	60	57	55	59.1
Spencer§	Maximum	85	86	87	90	89	90	00	94	90	85	73	83	83	87	87	89	87	93	92	94	88	89	90	86	86	89	85	88	80	82	84	87.0
	Minimum	55	55	56	53	54	56	60	60	64	58	67	53	53	60	58	50	52	52	58	61	63	52	56	69	67	56	59	62	65	57	53	58.8
Union§	Maximum	80	85	86	81	79	86	88	89	88	82	84	80	80	78	79	86	88	92	94	96	88	87	91	89	89	74	77	82	81	81	83	84.6
	Minimum	49	50	58	59	57	52	55	56	65	64	61	65	55	54	57	56	50	49	56	62	69	59	60	62	58	63	65	64	64	60	52	58.3
Williamson§	Maximum	83	85	85	83	86	85	85	88	85	83	81	71	78	77	78	82	85	89	90	91	87	84	90	86	83	82	84	83	79	78	82	83.5
	Minimum	49	54	59	59	59	60	61	63	65	68	67	66	62	62	63	55	55	57	58	63	65	66	60	65	66	67	67	68	68	62	60	61.9

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


No Rain
No Rain
No Rain
No Rain
No Rain
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

LIBRARY
OF THE
UNIVERSITY OF ILLINOIS
26 OCT 1914

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

SEPTEMBER, 1914

BY

HENRY C. HOWE

SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
OCTOBER 23, 1914

Departure of the Mean Temperature from the Normal, September, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXII. PARKERSBURG, W. VA., SEPTEMBER, 1914. No. 9.

GENERAL SUMMARY.

September was cool and exceptionally dry. The September rainfall was lighter in only three years of record. In most sections practically all the rainfall was received on two or three days. The amounts were greatest over the middle portions of the Great Kanawha basin, while in the Little Kanawha basin and many sections of the Monongahela basin the falls were less than 1 inch. The rains during the last decade in August kept the soil in good condition until near the middle of September. A severe drought prevailed at the close of the month and the rivers and streams were exceptionally low.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.18 and 30.20 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.45 inches on the 28th, and 29.95 inches on the 6th. Elkins, 30.48 inches on the 29th, and 29.86 inches on the 23d.

TEMPERATURE.

The monthly mean for the State, 43 stations reporting, was 63.2°. The mean departure from the normal for 35 stations having ten or more years of record was minus 3.1°. The month opened warm, but cooler weather set in on the 3d, and the morning temperatures on the 5th and 6th were abnormally low. The temperatures were near the normal on the 7th, but cool weather set in again on the 8th and continued until the 16th, with light to killing frosts in the central and northern sections on the 10th. Unseasonably warm weather prevailed from the 17th to the 23d, with the maximum temperatures above 90° in most sections on the 21st and 22d. The last week was cool, with heavy to killing frosts on the 27th and 29th. Owing to the lateness of the season, however, not much damage resulted.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 80 per cent; 8 p. m., 63 per cent. The September averages for the same hours for the past 25 years are 84 and 71 per cent, respectively. Elkins, 8 a. m., 86 per cent; 8 p. m., 77 per cent. The September averages for Elkins for the same hours for the past 14 years are 92 and 84 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 54 stations reporting, was 1.58 inches. The mean departure from the normal for 46 stations having ten or more years of record was minus 1.33 inches. Showers occurred on the 2-3d and 7-8th. They were heavy in sections of the Great Kanawha basin on the 3d. Moderate rains occurred in most sections on the 11th. Widely scattered showers fell on the 18th and 19th, while light to moderate rains occurred in most sections on the 23d-24th.

WIND.

The average wind velocity at Parkersburg was 4.3 miles per hour, or 0.1 of a mile below the September average for the past 25 years. The average at Elkins was 2.9 miles per hour, or 0.1 of a mile above the September average for 15 years. The highest velocity at Parkersburg was 25 miles per hour from the northwest on the 2d, and at Elkins 14 miles per hour from the west on the 4th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 65 per cent of the possible amount, or 8 per cent above the September average for 17 years. The average at Elkins was 60 per cent, or 9 per cent above the September average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 2d, 5th, 6th, 9th, 13th, 14th, 15th, 19th, 20th, 21st, 22d, 23d, 26th, 27th, 28th, 29th, and 30th; Charleston, 10th, 27th, 28th, and 30th; Elkins, 5th, 6th, 10th, 18th, 19th, 20th, 21st, 22d, 25th, 26th, 27th, 28th, and 29th; Grafton, 1st, 3d, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22d, 26th, 27th, 28th, 29th, and 30th; Hinton, 2d, 6th, 10th, 19th, 20th, and 21st; Huntington, 5th, 16th, and 21st; Mannington, 5th, 6th, 7th, 10th, 14th, 18th, 19th, 20th, 21st, 22d, 26th, 27th, 28th, and 29th; Morgantown, 10th; Parkersburg, 5th and 25th; Philippi, 5th, 7th, and 28th; Pickens, 24th, 25th, and 26th; Robertsburg, 20th, 21st, 25th, 26th, 27th, 28th, and 30th; Wellsburg, 25th.

Frost, light: Burlington, Cairo, Grafton, Lost City, Wheeling, and Upper Tract, 10th; Creston, 10th, 16th, 27th, and 29th; Elkins, 16th; Lewisburg, 10th and 26th; Mannington, 10th and 16th; Nuttallburg, 27th; Parkersburg, 10th, 26th, 27th, and 29th; Pickens, 5th and 14th; Philippi, 10th, 15th, 16th, and 26th; Ryan, 10th and 26th.

Frost, heavy: Buckhannon, 26th; Elkins, 26th; Grafton, 29th; Holcomb, 10th; Lewisburg, 27th; Mannington, 28th; Pickens, 10th, 15th, 16th, and 27th; Wellsburg, 28th.

Frost, killing: Bayard, 9th; Buckhannon, 27th and 29th; Davis, 10th; Burlington, Elkins, Green Sulphur Springs, Lewisburg, Mannington, Morgantown, Philippi, Ryan, and Upper Tract, 29th; Holcomb, 27th and 29th.

Hail: Bayard, 23d.

Halo, lunar: Parkersburg, 7th; Ryan, 30th.

Haze, light: Bayard, 21st, 22d, 23d, and 26th.

Thunderstorms (Dates and number of stations reporting): 2d, 2; 3d, 3; 6th, 1; 7th, 1; 8th, 1; 11th, 1; 17th, 1; 18th, 1; 19th, 2; 22d, 1; 23d, 7; 24th, 2.

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature.			Precipitation.
	Mean.	Highest.	Lowest.	
1891	66.8	..	..	1.66
1892	64.4	92	32	2.57
1893	65.0	91	29	2.28
1894	67.8	98	31	2.50
1895	70.3	107	29	1.70
1896	65.2	95	22	4.59
1897	66.4	103	27	1.14
1898	67.6	97	33	2.42
1899	64.0	100	26	3.65
1900	71.1	100	35	1.92
1901	64.8	95	27	3.35
1902	61.8	98	25	2.98
1903	64.7	97	25	1.30
1904	67.0	95	25	1.76
1905	65.6	97	29	2.21
1906	69.9	97	38	3.25
1907	66.3	93	30	4.11
1908	65.9	99	24	0.95
1909	63.7	95	28	2.74
1910	68.4	97	32	3.50
1911	68.8	100	32	4.67
1912	68.6	98	30	3.85
1913	64.2	100	25	2.88
1914	63.2	97	24	1.58
Entire period	66.4	107	22	2.66

Climatological Data for September, 1914.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	57.2	−3.3	88	2	24	29	47	2.13	−1.11	0.82	0	8	21	3	6	w.	Solomon Clark
Burlington	Mineral	875	20	61.0	−4.0	91	2†	29	29	42	1.60	−1.32	0.85	0	5	12	15	3	w.	J. W. Vandiver
Franklin	Pendleton	641	8																	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25								0.86	−2.05	0.66	0	3				w.	S. W. Lightner
Lost City	Hardy		8	59.5		88	21	32	29	42	1.09		0.49	0	5	11	13	6	e.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	64.2	−2.4	96	2	36	29	40	0.82	−2.06	0.30	0	5	24	3	3	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18								1.55	−1.23	0.65	0	5	23	4	3	nw.	John C. Fisher
Romney	Hampshire	824	17			94	2†				1.80	−0.70	0.75	0	3					Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	62.4	−4.0	94	22	30	29	47	1.22	−1.14	0.70	0	3	10	14	6	e.	J. M. Mallow
Averages and	Extremes			60.9	−3.4	96	2	24	29	47	1.38	−1.37	0.85	0	5	17	9	4	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	66.5	−1.9	92	2†	41	26	41	0.77	−1.56	0.65	0	2	26	3	1		J. D. Riggs
Brandonville	Preston	1,809	1																	W. T. Miller
Buckhannon	Upshur	1,411	24	60.3	−4.6	87	2	29	29	45	1.05	−2.06	0.80	0	2	20	7	3		H. A. Darnall
Cairo	Ritchie	674	12	65.7	−2.4	94	22†	31	29	45	1.02	−1.54	0.45	0	6	12	14	4	w.	Van A. Zevely
Central Station	Doddridge	950	12			94		30			1.13	−1.90		0						G. W. Sherwood
Cheat Bridge*	Randolph	3,600	1								1.50		0.78	0	4					Franz A. Degler
Cortland	Tucker	3,300	1								2.71		1.09	0	4					Samuel Harmon
Creston	Wirt	701	13	66.1	−1.5	96	21	34	29	48	0.96	−1.48	0.48	0	5	18	6	6	sw.	J. M. Reed
Davis	Tucker	3,093	7								2.04		0.55	0	9	18	4	8	w.	Ross C. Male
Elizabeth*	Wirt	646	4								0.75		0.41	0	2					E. D. Ball
Elkins	Randolph	1,940	15	60.5	−1.4	89	2	29	29	45	0.52	−2.35	0.31	0	5	15	7	8	n.	U. S. Weather Bureau
Fairmont	Marion	883	22	65.0	−3.4	97	21	34	29	50	0.97	−1.69	0.28	0	6	27	1	2	w.	F. P. Hall
Glenville	Gilmer	738	25	64.0	−3.7	97	1	34	30	47	0.23	−3.11	0.16	0	2	22	6	2	w.	Joe N. Craddock
Grafton	Taylor	1,000	22	62.7	−4.0	96	23	33	29	45	1.02	−1.91	0.50	0	3	22	4	4	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	59.7	−5.8	92	21	25	29	48	0.88	−2.03	0.60	0	2	22	4	4	w.	Allen Smith
Mannington	Marion	974	12	61.5	−4.5	90	22	31	29	44	1.46	−1.84	0.57	0	6	19	4	7	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250*	40	63.8	−4.0	90	21	31	29	44	2.19	−0.95	0.70	0	5	13	11	6	n.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	60.6		96	21	33	17	54	1.40	−1.17	0.50	0	3	20	7	3		M. Z. White
New Cumberland*	Hancock	987	15	62.6	−3.2	94	21	31	28	43	4.25	+2.51	4.05	0	2	17	2	11	s.	Frank S. Evans
New Martinsville	Wetzel	634	21	66.2	−2.7	95	21	38	29	43	0.91	−1.81	0.51	0	4	14	14	2	n.	Wm. Ankrom
Osceola	Randolph	3,600	0								1.60		0.40	0	6	12	11	7	w.	A. T. Dohmer
Parkersburg	Wood	638	26	65.5	−0.7	92	2	39	27	37	0.62	−2.10	0.44	0	4	14	12	4	se.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	59.4	−4.4	87	22	28	29	45	1.43	−1.79	0.40	0	6	16	10	4		J. W. Swisher
Philippi	Barbour	1,149	22	63.5	−2.2	92	22	29	29	46	1.14	−2.10	0.37	0	7	17	9	4	nw.	J. D. Dadisman
Pickens	Randolph	2,697	24	58.5[a]	−3.5	82[a]	2†	34[a]	10†	39[a]	0.85	−3.08	0.64	0	3	21	4	5	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29								1.06	−1.81	0.32	0	8				w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7								0.82		0.33	0	4				e.	J. O. Goodman
Smithfield	Wetzel	835	10	64.5		92	2	35	10	48	1.80	−1.61	0.85	0	6	15	11	4	n.	G. M Whisler
Terra Alta	Preston	2,612	14	59.0	−4.0	88	22	26	8	42	1.80	−1.97	0.90	0	3	19	0	11		H. C. Shaffer
Wellsburg	Brooke	1,225	20	61.6	−3.5	86	2†	37	28	36	1.16	−1.79	0.45	0	5	17	9	4	n.	C. P. Waugh
Weston	Lewis	1,026	26																	Miss C. M. Davis
Wheeling	Ohio	645	30	64.4		95	22	39	26†	42	1.19	−1.41	0.68	0	4	18	6	6	s.	Miss M. B. Forsyth
Averages and	Extremes			62.8	−3.2	97	1†	25	29	54	1.21	−1.87	1.09	0	5	18	7	5	w.	
Southern Section.																				
Bancroft	Putnam	574	11								2.25	−0.43	1.02	0	5	6	5	19	ne.	R. E. Dent
Beckley*	Raleigh	2,440	15	62.2	−1.3	85	1†	31	27†	48	0.17	−2.03	0.17	0	1	24	3	3	w.	John A. Ewart
Bluefield*	Mercer	2,558	20	63.8[g]	−2.5	87[g]	22	36			1.46	−1.05	0.78	0	4	16[g]	4[g]	3[g]		Norfolk & Western Ry.
Charleston	Kanawha	597	29	67.2	−3.6	92	2	42	26†	37	3.98	+1.12	2.30	0	7	18	6	6	w.	R. C. Hewes
Cuba*	Jackson	650	14	64.0	−3.3	92	21	34	29	45	0.78	−1.45	0.46	0	3	12	17	1	nw.	C. T. Perry
Doane	Wayne	717	7								0.25		0.10	0	3	21	9	0		L. A. Smith
Elkhorn	McDowell	1,933	22	64.3	−2.2	86	2	38	27	31	2.32	−0.51	0.74	0	4	19	8	3	w.	J. J. Lincoln
Green Sulphur Spgs	Summers	1,600	19	63.0	−3.4	90	21†	31	29	48	1.04	−1.18	0.68	0	5	16	9	5	w.	Arthur George
Hinton	do	1,450	25	65.8	−2.6	94	22	40	29	41	1.12	−1.64	0.66	0	6	12	0	18	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	61.2		90	2	29	29	49	2.62		0.80	0	6	19	1	10		R. E. Ferguson
Huntington	Cabell	538	19	65.1	−3.8	91	2	41	27	34	2.34	+0.01	0.98	0	6	16	3	11	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	61.2	−3.7	87	2	31	29	42	1.49	−1.26	0.55	0	4	24	3	3	nw.	Geo. T. Argabrite
Logan	Logan	687	12	70.4	+0.9	89	19†	49	26	31	1.47	−1.61	0.82	0	2	22	6	2	e.	Dr. J. E. McDonald
Madison	Boone	704	9	65.3[b]		91[b]	1†	44[a]	26†	35[b]	4.59		3.00	0	6	19[b]	5[b]	4[b]		S. E. Bradley
Marlinton	Pocahontas	2,131	18																	C. J. McCarty
Nuttallburg[b]	Fayette	2,252	22	56.7		79	22	34	27	30	5.65	+3.17	1.70	0	5	16	2	4		Miss Donna Tully
Point Pleasant	Mason	553	24	66.6	−3.3	95	2†	36	29	46	1.66	−0.57	0.94	0	5	19	2	9	ne.	W. D. Holmes
Powellton	Fayette	933	17	65.3	−1.9	92	2	36	27	40	3.05	+0.24	0.85	0	6	20	4	6		Morris Hansford
Princeton	Mercer	2,395	14																	H. Scott
Robertsburg	Putnam	574	14	66.2	−2.6	95	2†	35	29	49	1.23	−1.13	0.65	0	5	12	0	18		E. C. Brace
Ryan	Roane	700	11	62.9	−3.9	91	21†	29	28†	49	1.16	−1.33	0.54	0	3	19	6	5		Wm. E. Ryan
Spencer	do	784	16																	A. M. McKown
Sutton	Braxton	839	11	66.0[i]		95[i]		34[i]	29	489	2.00	−1.20	1.70	0	2	20[a]	5[a]	4[a]		Ben Gillespie
Union	Monroe	2,250	10	63.7	−1.3	90	2†	31	27	45	1.26	−1.31	0.42	0	5					Shelton Clark
Williamson	Mingo	660	13	64.6	−5.7	91	2	43	26†	31	2.18	−0.72	0.72	0	7	23	2	5	w.	J. F. Keyser
Averages and	Extremes			64.4	−2.9	95	2†	29	28†	49	2.19	−0.52	3.00	0	5	18	4	8	w.	
State Averages and	Extremes			63.2	−3.1	97	1†	24	29	54	1.58	−1.33	3.00	0	5	18	6	6	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for September, 1914.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac							.82	.02		.28	.16							T.	.12				.29	.42	.02							2.13
Burlington	do							.85	T.			*	.45											.20	.10								1.60
Franklin	do																																
Harpers Ferry	do								T.	.10														.10		.66						0.86
Lost City	do								.12			.49	.08											.15	.25							1.09
Martinsburg	do		.05					.10	T.			.22												.15	.30							0.82
Moorefield	do								.27			.13	.15				.35	.65														1.55
Romney	do							.55														.75				.50						1.80
Upper Tract	do								T.			.12	.40												.70							1.22
Northern Section.																																	
Bens Run	Ohio											.12												.65								0.77
Brandonville	Monongahela																																
Buckhannon	do		T.	T.			T.					.80												T.	.25							1.05
Cairo	Little Kanawha	.03						.17				.28	.03												.45	.06							1.02
Central Station	Middle Is. Creek	*	*	*	*	*	*	.43				.25										*	*	*	*	*	*	.45					1.13
Cheat Bridge	Monongahela																																
Cortland	do				.28								.75							1.09					.59								2.71
Creston	Little Kanawha			.10								.38	.10												.20	.18							0.96
Davis	Monongahela			.55				.51	.06			.08	.41	.03						.18					.10	.12							2.04
Elizabeth	Little Kanawha											.34																	.41				0.75
Elkins***	Monongahela		.08	.01				T.	.01			.31						T.						T.	.11								0.52
Fairmont	do			.20				.10				.06	.08												.25	.28							0.97
Glenville	Little Kanawha											.07													.16								0.23
Grafton	Monongahela		.15									.50													.37								1.02
Lost Creek	do											.28													.60								0.88
Mannington	do		.55	.02				.36				.09								T.					.01	.43							1.46
Morgantown	do		.50					.37				.70													.10	.52							2.19
Moundsville	Ohio		.50					.50																	.40								1.40
New Cumberland	do		4.05					T.																	.20								4.25
New Martinsville	do		.15									.05											.20		.51								0.91
Osceola	Monongahela							.20	.40				.30	.20											.30			.20					1.60
Parkersburg ***	Ohio	T.	T.				.01					.17												.03	.41								0.62
Parsons	Monongahela		.15					.35				.40								.20				.21	.12								1.43
Philippi	do		.08	.18				.01				.35												.11	.37	.04							1.14
Pickens	do							.16				.64												.05	T.								0.85
Rowlesburg	do			.06				.24				.04	.28					.02						.02	.24	.16							1.06
Saint Marys	Ohio			.33								.07													.30	.12							0.82
Smithfield	Fishing Creek		.02	.85								.24	.32												.22	.15							1.80
Terra Alta	Monongahela									.90				.30											.60								1.80
Wellsburg	Ohio	.15	.38					.12				.06													.45								1.16
Weston	Monongahela																																
Wheeling	Ohio			.68				.14	T.			T.	T.											T.	.21	.16							1.19
Southern Section.																																	
Bancroft	Great Kanawha			1.02							.68	.20													.25	.10							2.25
Beckley	do							.17																									0.17
Bluefield	do								.93			.60	.05												.78								1.46
Charleston	do			2.30				.04	.26			.68	.22												.12	.36							3.98
Cuba	Sand Creek		.03									.29											T.		.46								0.78
Doane	Big Sandy						.10								.06		.09																0.25
Elkhorn	do		.63						.74			.62													.33								2.32
Green Sulphur Spgs.	Great Kanawha							.02	.16			.66	.02												.18								1.04
Hinton	do			.02					.24			.14	.52												.04	.16							1.12
Holcomb	do			.50					.80			*	.57											.60	.15								2.62
Huntington	Ohio			.58				.04	.02			.72	T.												.86	.12							2.34
Lewisburg	Great Kanawha							T.	.21			.48								.25					.55								1.49
Logan	Guyandotte			.65			T.					.82						T.															1.47
Madison	Great Kanawha			3.00					.17			.80	.20					T.		.05	T.					.37							4.59
Marlinton	do																																
Nuttallburg	do			1.40				.45				.90							T.					1.70	1.20								5.65
Point Pleasant	Ohio			.36								.18	.18												.78	.16							1.66
Powelton	Great Kanawha			.83				.50	.53			.85									.04				.30								3.05
Princeton	do																																
Robertsburg	do			.18								.60	.05												.23	.17							1.23
Ryan	do		.24									.54								T.					.38								1.16
Spencer	Little Kanawha																																
Sutton	Great Kanawha												1.70					T.	T.					T.	.30								2.00
Union	do			.01						.42		.37	.25												.21								1.26
Williamson	Big Sandy			.66				.04	.30			.72	.10												.10	.26							2.18

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

Daily Temperatures for September, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	84	88	86	73	73	78	76	75	69	68	52	50	65	67	70	70	72	81	80	82	85	86	87	67	61	57	65	66	71	70	..	72.5
	Minimum	52	62	63	46	36	40	61	47	29	40	45	40	38	32	34	30	47	55	53	40	42	42	50	52	29	30	30	35	24	34	..	41.9
Burlington	Maximum	87	91	81	74	73	83	83	68	70	59	64	60	68	68	71	74	75	83	84	85	89	91	88	71	66	64	70	65	71	76	..	75.1
	Minimum	70	65	58	52	43	45	62	52	48	34	42	45	43	38	37	36	49	55	56	47	50	50	55	56	45	38	35	35	29	39	..	47.0
Lost City	Maximum	82	84	78	71	70	69	78	76	62	63	62	58	67	63	64	65	69	80	84	82	88	82	80	80	60	62	64	61	64	66	..	71.1
	Minimum	57	66	63	53	43	40	48	45	48	34	44	49	51	40	42	38	45	62	65	62	60	40	56	56	47	43	36	38	32	34	..	47.9
Martinsburg§	Maximum	90	96	83	77	77	87	85	70	69	73	60	60	73	73	75	78	80	84	87	88	89	92	91	71	66	68	75	69	71	78	..	77.8
	Minimum	62	63	70	57	50	51	55	56	46	39	40	51	46	43	44	43	46	55	56	55	56	57	60	62	52	47	46	39	36	38	..	50.7
Romney	Maximum	90	94	89	75	74	85	82	84	66	61	58	59	65	60	68	74	76	85	85	87	94	90	92	70	72	68	66	65	71	77	..	76.1
	Minimum	60	67	66	55	44	45	64	54	39	33	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
Upper Tract	Maximum	86	93	86	76	79	80	85	77	76	72	71	72	67	72	75	77	67	82	83	83	90	94	90	78	64	65	70	69	77	77	..	77.8
	Minimum	57	64	65	51	40	51	67	53	50	31	34	40	46	35	38	34	48	60	59	49	53	52	55	56	44	36	33	40	30	38	..	47.0
Northern Section.																																	
Bens Run	Maximum	88	92	77	69	76	83	81	69	71	70	62	81	87	82	86	85	80	87	91	91	92	87	85	72	66	73	72	76	78	80	..	79.6
	Minimum	59	71	62	59	50	55	65	55	45	43	51	49	46	45	49	56	60	62	64	56	59	63	54	50	47	41	43	49	48	46	..	53.4
Buckhannon	Maximum	85	87	78	72	73	78	75	67	67	67	62	66	72	66	75	80	78	82	82	85	85	85	82	78	65	65	67	65	71	73	..	74.4
	Minimum	55	63	64	51	42	48	60	52	45	33	54	50	42	40	36	35	48	52	52	50	48	48	58	52	38	33	32	38	29	37	..	46.2
Central Station	Maximum	..	..	..	..	..	..	84	66	67	72	58	65	77	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
	Minimum	..	..	..	..	..	..	63	52	39	33	47	48	43	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
Creston	Maximum	91	93	85	75	82	86	90	72	75	75	61	71	80	81	84	86	85	87	90	94	96	95	92	71	71	72	78	78	82	83	..	82.0
	Minimum	59	67	65	54	44	50	68	57	47	38	50	50	44	45	41	40	54	56	60	55	52	55	61	55	48	39	36	42	24	40	..	50.2
Elkins	Maximum	86	89	76	66	76	81	80	64	63	69	57	60	68	75	79	77	74	79	84	85	88	89	84	65	64	60	66	67	74	73	..	73.9
	Minimum	59	64	53	50	43	48	57	48	40	35	46	51	50	48	41	38	57	56	57	51	49	48	59	51	45	36	34	35	29	36	..	47.1
Fairmont§	Maximum	90	92	82	71	82	85	85	71	68	77	60	68	79	84	90	89	84	94	93	95	97	95	89	58	74	73	74	76	83	81	..	81.3
	Minimum	59	67	65	53	49	50	62	54	41	40	42	52	46	40	40	43	48	57	58	51	51	52	55	55	49	39	36	39	34	36	..	48.8
Glenville	Maximum	97	94	89	76	78	84	86	85	87	78	77	78	80	82	88	86	88	87	89	88	90	91	90	78	79	80	78	76	74	73	..	82.5
	Minimum	63	59	60	51	45	47	46	47	45	39	44	41	39	43	41	42	44	45	44	46	47	47	45	42	43	41	38	36	35	34	..	44.6
Grafton	Maximum	79	79	79	65	75	77	77	74	64	69	64	62	72	72	72	73	76	84	82	95	94	94	96	78	66	67	72	71	73	72	..	75.8
	Minimum	63	59	65	51	52	50	65	54	42	37	48	52	43	52	54	41	48	56	61	50	52	50	52	57	50	39	36	37	33	40	..	49.6
Lost Creek	Maximum	86	88	78	68	71	80	82	68	63	70	62	71	68	77	80	80	81	86	85	89	92	89	85	77	64	62	70	67	70	77	..	76.2
	Minimum	60	62	62	51	38	41	63	52	39	29	44	38	39	33	33	32	47	46	45	42	45	46	56	52	41	32	29	35	25	36	..	43.2
Mannington	Maximum	87	89	76	70	73	80	80	72	63	69	58	63	72	75	77	80	81	86	85	87	89	90	84	73	67	62	69	67	75	75	..	75.8
	Minimum	62	66	63	51	46	48	62	52	39	36	47	52	45	38	37	36	50	55	55	46	48	49	57	54	47	36	34	34	31	39	..	47.2
Morgantown	Maximum	88	89	76	69	76	85	78	73	61	68	60	65	63	73	79	76	73	86	84	89	90	89	84	72	67	61	69	66	75	72	..	75.2
	Minimum	67	67	63	59	46	52	64	53	55	35	50	50	52	52	48	49	56	61	50	52	55	57	64	53	50	39	42	37	31	51	..	52.3
New Cumberland	Maximum	86	88	78	67	76	81	75	65	60	68	68	61	72	77	81	80	82	86	84	92	94	92	96	78	65	67	68	70	72	78	..	76.2
	Minimum	68	67	57	57	48	50	55	55	38	34	50	50	47	55	44	38	47	55	50	50	55	55	58	53	45	36	38	31	35	48	..	49.0
New Martinsville	Maximum	89	92	81	74	79	84	82	74	68	72	61	69	80	82	84	88	88	91	89	91	95	94	88	68	74	70	77	74	81	79	..	80.6
	Minimum	66	71	64	56	49	51	64	55	45	42	50	54	47	43	45	46	54	60	61	51	54	56	62	55	48	41	40	40	38	44	..	51.7
Parkersburg	Maximum	90	92	78	68	77	84	83	66	65	69	63	67	76	78	79	82	82	86	86	88	91	92	85	64	68	65	72	68	77	77	..	77.3
	Minimum	69	73	66	58	48	55	62	54	48	42	53	54	50	50	50	47	60	61	63	55	57	61	59	53	47	45	39	46	50	47	..	53.7
Parsons	Maximum	86	86	75	75	74	78	79	63	65	68	64	56	67	74	77	77	83	80	81	83	85	87	82	68	64	63	66	68	73	73	..	74.0
	Minimum	58	56	46	45	44	50	60	52	50	36	45	49	41	41	37	35	50	52	54	52	50	45	54	53	32	31	29	35	28	34	..	44.8
Philippi	Maximum	86	91	89	83	77	82	82	78	74	72	74	67	66	70	80	76	83	83	86	88	91	92	85	74	67	62	70	69	75	67	..	78.0
	Minimum	67	71	53	51	43	59	71	60	50	38	61	58	40	40	36	41	43	55	57	48	47	47	58	55	47	35	33	40	29	38	..	49.0
Pickens	Maximum	80	82	71	72	71	74	73	57	..	63	54	53	69	71	72	76	80	72	76	77	80	82	80	65	57	57	60	61	67	67	..	69.6
	Minimum	58	65	55	51	41	51	57	43	..	34	46	49	46	41	46	37	53	54	58	54	54	57	59	47	41	36	35	34	34	42	..	47.4
Wellsburg	Maximum	82	86	73	67	71	77	74	62	60	65	60	60	71	73	75	78	81	83	83	86	86	80	75	65	63	61	69	63	72	69	..	72.3
	Minimum	65	70	61	56	47	54	60	51	41	38	51	49	48	48	49	49	51	57	54	56	50	52	61	53	45	40	46	37	40	53	..	51.0
Weston§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
Wheeling§	Maximum	87	93	82	69	75	82	85	71	71	74	64	66	77	81	80	85	84	83	86	87	91	95	88	65	75	70	77	74	79	74	..	79.0
	Minimum	64	69	62	51	51	51	60	55	44	41	45	54	45	46	46	43	43	53	58	51	52	56	58	55	45	39	41	41	39	40	..	49.9
Southern Section.																																	
Beckley	Maximum	85	84	85	78	75	81	80	75	69	76	72	73	70	71	75	71	80	79	80	82	80	85	81	79	77	71	79	71	70	80	..	77.1
	Minimum	54	60	64	50	42	45	56	39	38	36	43	42	51	42	49	54	60	50	51	60	62	55	50	40	46	40	31	37	31	38	..	47.2
Bluefield	Maximum	85	85	82	76	79	82	..	80	70	71	66	64	..	70	74	71	72	75	81	..	..	87	83	78	63	64	..	72	..	..	..	75.2
	Minimum	61	65	64	52	46	56	..	60	50	42	50	52	..	47	47	49	57	55	57	..	..	57	59	53	46	44	..	36	..	..	..	52.4
Charleston	Maximum	90	92	80	74	78	84	83	78	70	73	65	69	75	78	81	81	80	83	88	50	90	90	86	74	67	67	72	75	79	80	..	79.1
	Minimum	68	68	67	56	51	56	68	62	53	46	53	56	48	48	47	49	58	60	65	64	60	62	67	58	52	42	53	47	42	47	..	55.4
Elkhorn	Maximum	85	86	82	76	77	80	81	78	75	72	62	62	65	72	75	74	74	80	84	85	85	82	79	84	68	68	64	71	74	76	..	75.5
	Minimum	63	55	56	54	50	54	61	55	49	42	58	56	56	58	51	52	63	58	60	59	60	58	54	52	48	42	58	42	44	46	..	53.1
Green Sulphur Spgs.	Maximum	88	89	79	74	78	81	81	81	69	72	61	60	69	74	77	77	74	82	84	86	90	90	87	71	67	65	71	74	79	77	..	76.9
	Minimum	58	62	64	50	43	47	60	60	51	35	46	51	52	41	43	41	60	62	59	56	52	50	57	54	45	41	32	35	31	35	..	49.1
Hinton§	Maximum	90	92	83	80	81	85	89	78	72	72	57	56	72	77	79	80	77	84	87	90	92	94	90	66	69	67	74	75	81	80	..	79.0
	Minimum	59	65	66	55	50	51	54	63	52	44	45	51	54	45	46	44	47	65	63	61	59	57	58	63	49	48	41	41	40	41	..	52.7
Holcomb§	Maximum	88	90	78	71	89	82	80	70	65	71	56	69	72	77	81	82	83	80	84	87	89	88	84	76	66	64	68	72	78	76	..	77.2
	Minimum	56	57	61	47	41	46	57	52	44	34	59	50	45	43	40	37	40	51	53	49	53	49	55	51	42	38	30	34	29	34	..	45.2
Huntington§	Maximum	89	91	82	75	77	84	84	61	70	71	65	64	64	77	78	79	80	80	87	88	87	88	83	68	66	65	68	69	74	77	..	76.3
	Minimum	65	71	65	59	51	54	62	60	52	44	45	53	50	50	49	49	49	60	62	62	58	58	66	55	49	45	41	43	47	43	..	53.9
Lewisburg	Maximum	85	87	78	72	76	81	79	75	67	68	61	56	67	69	73	73	73	77	82	83	85	86	86	76	65	62	68	70	73	74	..	74.2
	Minimum	58	60	63	49	41	46	52	58	54	36	44	52	50	41	42	41	59	61	59	53	52	50	54	54	44	40	32	36	51	55	..	48.2
Logan	Maximum	87	88	88	86	80	77	81	84	77	75	75	76	78	78	80	81	83	86	89	88	88	89	84	82	78	70	71	76	79	82	..	81.2
	Minimum	68	68	66	64	62	56	64	69	54	51	58	56	58	56	59	59	60	62	62	64	65	67	67	64	55	49	50	54	52	71	..	59.7
Madison§	Maximum	91	90	82	74	80	85	84	67	57	71	64	58	76	81	82	82	83	87	89	90	90	91	87	67	68	68	48	50	..	..	..	76.3
	Minimum	61	67	68	55	52	53	60	62	51	45	48	56	48	48	48	48	58	60	61	65	60	61	62	52	51	44	44	44	46	..	..	51.4
Marlinton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
Point Pleasant	Maximum	93	95	82	77	81	88	90	78	73	75	69	72	78	82	84	87	89	94	95	94	95	95	89	68	72	71	77	77	81	85	..	82.7
	Minimum	66	69	61	56	46	51	69	54	43	38	49	49	45	45	42	41	52	59	58	49	51	49	61	51	47	38	59	45	56	43	..	50.1
Powellton	Maximum	90	92	79	75	80	85	85	67	69	63	64	65	74	70	80	82	80	82	84	86	88	90	85	73	72	69	76	77	76	79	..	77.1
	Minimum	66	64	66	52	46	50	60	62	48	46	49	53	53	48	46	45	57	56	59	60	69	55	62	56	48	39	36	47	52	59	..	52.7
Robertsburg§	Maximum	93	95	80	72	82	86	87	68	70	75	67	73	78	83	85	83	85	90	93	95	95	95	88	65	70	70	75	75	81	84	..	81.
	Minimum	65	68	65	55	44	52	61	58	48	38	49	49	50	54	46	42	43	57	59	55	55	59	60	54	49	49	57	42	55	42	..	51.0
Ryan	Maximum	80	90	80	75	76	82	83	68	69	72	68	72	77	78	80	85	81	82	87	88	91	91	85	69	68	67	72	78	78	80	..	78.
	Minimum	65	67	56	48	41	48	58	57	51	32	49	49	43	43	42	36	53	55	56	56	51	53	59	50	50	31	32	29	29	37	..	47.
Spencer§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
Union§	Maximum	85	90	81	76	82	80	84	87	70	72	56	59	69	74	77	78	77	78	77	85	90	90	89	87	70	68	70	70	78	79	..	77.9
	Minimum	58	59	62	50	41	49	52	58	55	39	44	51	50	41	43	42	58	58	57	56	60	64	65	56	46	41	31	38	33	36	..	49
Williamson§	Maximum	88	91	76	75	76	82	84	08	69	71	61	67	74	74	78	76	78	82	85	86	88	85	82	56	64	64	69	73	75	76	..	75.
	Minimum	61	65	66	55	51	51	62	62	50	45	46	54	52	50	48	48	48	59	60	62	63	61	61	53	49	43	43	45	47	47	..	53.

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


No Rain.
No Rain.
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

W E
Stack
LIBRARY OF THE UNIVERSITY OF ILLINOIS
30 NOV 1914

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

OCTOBER, 1914

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
NOVEMBER 24, 1914

Departure of the Mean Temperature from the Normal, October, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXII. PARKERSBURG, W. VA., OCTOBER, 1914. NO. 10.

GENERAL SUMMARY.

October was not only considerably warmer than usual but the temperature distribution was exceptionally favorable. Killing frosts did not occur in the agricultural districts until well into the last decade. Late crops were harvested in good condition and the pastures and fields were green until about the close of the month. The precipitation was slightly above the normal and well distributed over the State and throughout the month, with a corresponding deficiency in sunshine. The snowfall was unimportant. The rivers and streams continued exceptionally low during the month.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.11 and 30.14 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.35 inches on the 21st, and 29.83 inches on the 16th. Elkins, 30.40 inches on the 21st, and 29.80 inches on the 16th.

TEMPERATURE.

The monthly mean for the State, 44 stations reporting, was 57.3°. The mean departure from the normal for 36 stations having ten or more years of record was plus 2.8°. The month opened with the temperatures practically normal, but warm weather for the season prevailed from the 2d to the 17th, with the highest temperatures of the month occurring in most sections from the 6th to the 10th. While the temperatures were near the normal or slightly below on the 17th and 18th, warm weather again prevailed from the 19th to the 25th. Freezing temperatures and killing frosts occurred in all sections on the 27th and 28th. Owing to the lateness of the season, however, practically no damage resulted. The temperature conditions were normal at the close of the month.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 83 per cent; 8 p. m., 70 per cent. The October averages for the same hours for the past 26 years are 83 and 70 per cent, respectively. Elkins, 8 a. m., 88 per cent; 8 p. m., 80 per cent. The October averages for Elkins for the same hours for the past 14 years are 89 and 77 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 52 stations reporting, was 2.94 inches. The mean departure from the normal for 44 stations having ten or more years of record was plus 0.29 of an inch. The precipitation was heaviest over the southern counties and lightest over the eastern panhandle section, the latter section showing a deficiency of more than one-half of an inch. In nearly all portions of the northern section the amounts were practically normal. Scattered showers, mostly light, occurred daily from the 4th to the 11th. Light to moderate and well distributed rains occurred daily in practically all sections from the 13th to the 18th and the 24th to the 27th. Scattered and light showers occurred on the 29th and 30th. Light snow or snow flurries occurred in many sections on the 27th.

WIND.

The average wind velocity at Parkersburg was 4.2 miles per hour, or 0.8 of a mile below the October average for the past 25 years. The average at Elkins was 3.1 miles per hour, or 0.3 of a mile below the October average for 15 years. The highest velocity at Parkersburg was 30 miles per hour from the southwest on the 10th, and at Elkins 22 miles per hour from the west on the 17th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 44 per cent of the possible amount, or 5 per cent below the October average for 17 years. The average at Elkins was 43 per cent, or 2 per cent below the October average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 6th, 7th, 8th, 19th, 20th, 21st, 22d, and 31st; Burlington, 15th; Charleston, 1st, 5th, 6th, 12th, 19th, 21st, and 22d; Elkins, 1st, 2d, 6th, 8th, 9th, 12th, 20th, 21st, and 22d; Creston, 17th and 19th; Fairmont, 6th, 12th, 20th, 21st, and 22d; Grafton, 1st, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 12th, 19th, 21st, 22d, and 23d; Hinton, 6th, 8th, 9th, 17th, and 19th; Huntington, 12th, 19th, 21st, and 22d; Lewisburg, 19th; Mannington, 1st, 2d, 7th, 9th, 10th, 12th, 16th, 19th, 20th, 21st, and 22d; Nuttallburg, 25th; Parkersburg, 7th, 12th, 19th, 21st, and 22d; Philippi, 1st, 11th, 19th, and 21st; Pickens, 24th and 25th; Rowlesburg, 8th, 9th, 11th, 20th, 21st, and 22d; Wellsburg, 7th; Wheeling, 1st, 2d, 5th, 6th, 7th, 9th, 12th, 19th, 20th, 21st, 22d, and 31st.

Hail: Morgantown, 8th.

Halo, lunar: Parkersburg, 5th and 28th; Ryan, 6th and 29th.

Halo, solar: Ryan, 3d and 28th.

Thunderstorms (Dates and number of stations reporting): 6th, 2; 8th, 13; 9th, 1; 10th, 6; 11th, 1; 13th, 1; 17th, 1.

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in inches.
1891	51.5	95	24	1.97	....
1892	52.6	89	24	0.83	....
1893	54.1	86	16	4.74	....
1894	54.4	88	22	2.32	....
1895	48.1	89	8	1.29	....
1896	51.0	82	20	2.08	....
1897	58.2	95	22	0.53	....
1898	55.6	95	19	4.84	....
1899	56.8	91	19	1.42	0
1900	60.9	96	24	2.33	0
1901	54.3	86	19	0.54	0
1902	56.5	87	17	2.63	T.
1903	54.2	96	15	2.55	T.
1904	54.5	92	16	1.59	T.
1905	54.2	95	19	4.71	T.
1906	54.5	86	12	3.09	0
1907	50.3	87	19	2.65	0.1
1908	55.1	91	16	1.60	T.
1909	50.0	88	14	2.79	0.1
1910	58.1	95	15	1.85	0.7
1911	56.3	88	23	5.28	0
1912	55.5	93	20	1.34	T.
1913	54.5	92	12	4.50	0.3
1914	57.3	91	14	2.94	T.
Entire period	54.5	96	8	2.52	0.1

Climatological Data for October, 1914.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard [b]	Grant	2,500	12	51.7	+2.8	81	10	23	27	42	2.20	−1.28	0.70	0.5	9	14	5	10	w.	Solomon Clark
Burlington	Mineral	875	20	56.0	+2.5	86	10	26	28	40	2.50	+0.31	.....	0	5	7	20	4	nw.	J. W. Vandiver
Franklin	Pendleton	641	8	53.8	.....	75	6†	20	28	28	3.00	.....	0.90	T.	7	12	9	10	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	1.75	−1.13	0.95	0	3	.....	.....	.....	w.	S. W. Lightner
Lost City	Hardy	.....	8	55.0	.....	78	10	24	27	31	2.98	.....	1.55	0	5	7	17	7	e.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	58.2	+3.9	84	10	32	27†	34	2.20	−0.39	.....	0	7	16	5	10	e.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	59.2	+4.6	86	12	28	29	40	1.50	−1.23	0.75	0	2	16	11	4	sw.	John C. Fisher
Romney	Hampshire	824	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Upper Tract	Pendleton	1,230	15	55.5[a]	+0.4	82 [a]	6†	23 [a]	28	41[a]	2.49	+0.22	0.80	0	7	14	10	7	w.	J. M. Mallow
Averages and	Extremes	.....	.....	55.6	+2.8	86	10†	20	28	42	2.33	−0.58	1.55	0.1	6	12	11	8	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	60.0	+4.1	86	5†	29	27	38	2.98	+0.02	0.62	0	11	17	8	6	.....	J. D. Riggs
Brandonville *	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	3.28	.....	.....	0	9	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	55.2	+2.4	82	10	22	28	40	3.24	−0.14	0.56	T.	10	16	5	10	.....	H. A. Darnall
Cairo	Ritchie	674	12	60.2	+2.8	88	6†	22	28	49	3.03	−0.02	0.85	0	13	5	13	13	.....	Van A. Zevely
Central Station	Doddridge	950	12	.....	.....	90	.....	25	.....	.....	2.75	+0.31	.....	0	.....	.....	.....	.....	.....	G. W. Sherwood
Cheat Bridge *	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	3.68	.....	1.55	0	8	.....	.....	.....	.....	Franz A. Degler
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	1.37	.....	0.47	0	7	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	60.0	+5.4	91	7	24	28	44	2.97	+0.40	0.65	0	11	9	4	18	w.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	2.78	.....	0.55	T.	12	14	2	15	sw.	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	3.04	.....	0.80	0	10	.....	.....	.....	.....	E. D. Ball
Elkins *	Randolph	1,940	15	55.2	+3.8	86	10	24	28	40	2.25	−0.17	0.70	0.5	15	8	13	10	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	58.6	+3.6	89	10	28	28	45	2.60	+0.06	0.77	T.	11	19	1	11	w.	F. P. Hall
Glenville	Gilmer	738	25	59.2[m]	+4.2	90	8	.....	.....	42[m]	2.17	−0.72	.....	0	9	17	3	11	s.	Joe N. Craddock
Grafton	Taylor	1,000	22	57.4	+2.4	78	6†	24	28	34	3.30	+0.57	0.70	T.	13	12	9	10	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	56.8	+2.4	88	10	27	28	44	2.06	−0.40	0.69	0	8	17	6	8	w.	Allen Smith
Mannington	Marion	974	12	56.6	+3.0	85	10	24	28	41	2.72	+0.23	0.80	T.	12	14	3	14	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	58.2	+3.2	83	9	27	27	30	6.72	+3.73	2.52	T.	11	6	11	14	s.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	.....	.....	.....	.....	29 [n]	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Z. White
New Cumberland *	Hancock	987	15	58.0	+3.9	85	5	28	28	40	2.30	−0.47	0.60	T.	9	13	1	17	s.	Frank S. Evans
New Martinsville	Wetzel	634	21	60.0	+3.5	89	10	29	28	39	3.23	+0.67	0.90	0	11	8	14	9	s.	Wm. Ankrom
Osceola	Randolph	3,600	0	.....	.....	.....	.....	.....	.....	.....	4.29	.....	0.95	0	9	.....	.....	.....	.....	A. T. Dohmer
Parkersburg	Wood	638	26	59.2	+4.8	84	6	29	27	33	2.91	+0.47	0.83	0	11	9	8	14	se.	U. S. Weather Bureau
Parsons *	Tucker	1,656	15	55.4	+2.8	85	9†	20	28†	43	2.61	−0.24	0.50	T.	12	13	12	6	.....	J. W. Swisher
Philippi	Barbour	1,149	22	56.2	+2.2	90	9	25	28	39	3.09	+0.23	0.84	T.	14	12	9	10	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	54.6	+3.0	82	22	18	28	42	3.24	−0.55	0.83	0.1	13	13	6	12	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	3.46	+0.68	0.68	0	14	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	2.17	.....	1.25	0	4	.....	.....	.....	e.	J. O. Goodman
Smithfield	Wetzel	835	10	59.4	.....	89	5	29	27	52	2.16	−1.02	0.60	0	8	12	8	11	w.	G. M. Whisler
Terra Alta	Preston	2,612	14	55.8	+4.1	84	11	22	28	36	.....	.....	.....	.....	.....	12	8	11	.....	H. C. Shaffer
Wellsburg [c]	Brooke	1,225	20	56.2	+2.8	81	9	28	28	27	2.64	−0.06	0.60	0	9	12	9	7	w.	C. P. Waugh
Weston	Lewis	1,026	26	56.7[e]	+1.9	86 [b]	10	24 [e]	28	38[e]	2.55	−0.49	0.52	0	10	11[e]	7[e]	10[e]	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	60.1	.....	87	8†	31	27†	40	2.63	+0.28	0.70	T.	11	14	6	11	sw.	Miss M. B. Forsyth
Averages and	Extremes	.....	.....	57.8	+3.3	91	7	18	28	52	2.94	+0.19	2.52	0.1	11	12	7	12	w.	
Southern Section.																				
Bancroft	Putnam	574	11	.....	.....	.....	.....	25	28	....	3.34	+0.54	0.70	T.	11	6	9	16	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	56.0	+2.0	81	5†	21	28	39	2.81	+0.42	1.40	T.	4	16	4	11	w.	John A. Ewart
Bluefield	Mercer	2,558	20	56.8[e]	+1.5	82 [e]	9†	22 [e]	28	36[e]	2.41	−0.12	0.66	0	5	11[e]	7[e]	10[e]	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	60.2	+1.9	86	7†	26	28	33	3.10	+0.55	0.84	0	13	10	7	14	w.	R. C. Hewes
Cuba *	Jackson	650	14	58.0	+3.2	89	7	23	28	41	3.79	+1.09	1.50	0	11	9	16	6	w.	C. T. Perry
Dunlow *	Wayne	717	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	9	9	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	58.2	+2.7	81	7†	24	28	33	3.18	+0.61	1.02	0	8	9	12	10	w.	J. J. Lincoln
Green Sulphur Spgs	Summers	1,600	19	56.4	+2.0	84	10	17	28	43	2.28	+0.42	0.88	0	11	8	12	11	w.	Arthur George
Hinton	do	1,450	25	58.8	+2.4	88	7	26	28	40	2.40	+0.05	0.84	T.	7	14	4	13	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	55.4	.....	85	10	18	28	45	3.51	.....	0.77	T.	10	10	5	16	.....	R. E. Ferguson
Huntington	Cabell	538	19	58.0	+2.0	80	6†	30	27†	28	3.68	+1.51	0.96	0	11	16	3	12	.....	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	55.6	+2.6	81	10	20	28	36	3.57	+0.84	0.89	T.	9	12	9	10	sw.	Geo. T. Argabrite
Logan *	Logan	687	12	65.9[e]	.....	84 [e]	9	30 [e]	28	39[e]	3.10	+0.55	0.93	0.3	11	8[e]	9[e]	11[e]	ne.	Dr. J. E. McDonald
Madison *	Boone	704	9	57.6[b]	.....	88 [b]	7	25 [b]	28†	35[b]	2.40	.....	0.65	0	11	8[b]	4[b]	11[b]	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. J. McCarty
Nuttallburg	Fayette	2,252	22	53.0[l]	.....	73 [l]	7	21 [l]	28	25[l]	4.30	+1.88	1.55	T.	6	10[l]	5[l]	4[l]	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	58.8	+1.4	90	6	25	27	44	3.67	+1.30	1.00	0	15	12	6	13	se.	W. D. Holmes
Powellton [a]	Fayette	933	17	58.8	+3.9	86	9†	22	28	37	3.74	+1.71	0.90	0	13	9	9	12	.....	Morris Hansford
Robertsburg	Putnam	574	14	58.7	+1.6	90	5†	25	28	43	3.77	+1.33	0.74	0	10	14	4	13	.....	E. C. Brace
Ryan	Roane	700	11	57.9	+4.3	85	5†	20	28	44	3.95	+0.91	0.72	0	13	11	5	15	.....	Wm. E. Ryan
Spencer *	do	784	16	59.6	.....	89	7	23	28	45	4.03	+1.24	0.90	0	9	6	11	14	.....	A. M. McKown
Sutton	Braxton	839	11	57.9[a]	.....	90 [a]	10	14 [a]	28	50[b]	3.28	+0.37	1.10	0	7	10	0	21	.....	Ben Gillespie
Union	Monroe	2,250	10	57.2	+4.9	85	11	20	28	38	3.06	+0.30	1.02	0	6	.....	.....	.....	.....	Shelton Clark
Williamson	Mingo	660	13	57.8	−0.5	83	6	23	28	35	2.04	−0.42	1.10	0	11	9	8	14	w.	J. F. Keyser
Averages and	Extremes	.....	.....	57.4	+2.3	90	5†	14	28	50	3.23	+0.72	1.55	T.	9	11	7	13	w.	
State Averages and	Extremes	.....	.....	57.3	+2.8	91	7	14	28	52	2.94	+0.29	2.52	T.	9	12	8	11	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for October, 1914.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac								.05	T.		.54		.08	.70	.08		.50	.10						T.	.10	T.	.65		T.			2.20
Burlington	do								.50		T.			*	*	*	2.00								T.	T.							2.50
Franklin	do				.40			T.	.30	.20				T.	.80	.90		T.	.10						.40		T.	T.					3.00
Harpers Ferry	do														.45	.35	.95	T.							T.								1.75
Post City	do				T.	.20			.25					T.	.68	.30	1.55																2.98
Martinsburg	do							T.	.10					*	*	*	1.98		.07							.05				T.			2.20
Moorefield	do					T.		T.							T.	.75	.75	T.		T.					T.	T.								1.50
Romney	do																																
Upper Tract	do				T.		T.	.22	.45					.80	.20	.50		T.	.02						.30			T.					2.49
Northern Section.																																	
Glens Run	Ohio									T.	.38	.02		.62	.18	.50	.18	.43	.27						.30			.04		.06			2.98
Grandonville	Monongahela									*	*	1.09			.94		.46	.10		.36								.17		.16			3.28
Buckhannon	do				T.				.50		.36			.55	T.	T.	.38	.12	.20						.56	.07	.20	T.		T.	.30		3.24
Cairo	Little Kanawha						.04	.08	.03		.28	.02			.85	.15	.48	.40	.15						.30			.11			.14		3.03
Central Station	Middle Is. Creek					T.			.02	*	.25	.15		.54	.07	.16	.32	.41	.08	*	*	*	*	*	*	.56	*	*	*	*	*	.19	2.75
Cheat Bridge	Monongahela				.34										1.55	.75	T.		.27						.20	.40			.16		.01		3.68
Portland	do									.12		.09			.47		.30		.06	.21						.12							1.37
Preston	Little Kanawha				.05							.45			.52	.09	.65	.45	.10						.40	.04	T.	.10		T.	.12		2.97
Davis	Monongahela				.03					.27		.33			.50	.07	.55		.11	.29					.06	.02	.05	T.	T.		.50		2.78
Elizabeth	Little Kanawha											.48			.80	.41	.47	.23	.14						.12	.23		.10			.06		3.04
Elkins***	Monongahela				.03			.01	.03		.11			.56	.14	.25	.04	.06	.10						.53	T.	.12	.01		.25	.01		2.25
Fairmont	do							T.		.04		.55		.02	.77		.36	.13	.20	T.					.27	.10	T.	.06	T.		.10		2.60
Glenville	Little Kanawha										.12	.15			.35		*		.40						*	.95	.05			.15			2.17
Grafton	Monongahela								.11			.37		.30	.70	.05	.40	.05	.30						.45	.27		.15		.10	.05		3.30
Lost Creek	do								T.		.12	T.		.65	T.	.10	.25	.11	.09						.69	.05		T.		T.	T.		2.06
Mannington	do										.21	.30		.35	.45	T.	.60	.20	.14						.27		.03	.03		.03	.11		2.72
Morgantown	do								2.52		.50	.67		.38	.58	T.	.25	.70	.32						.10		.60	.10		T.			6.72
Moundsville	Ohio																																
New Cumberland	do					T.		T.	T.		.40	.10		.60	.20	.10	.30	.10	.40								T.	T.		.10			2.30
New Martinsville	do										.35	.04		.90	.10	.25	.30	.50	.65						.10		.02			.02			3.23
Osceola	Monongahela				.90					.95		.44			.70		.45		.25				.10		.40					.10			4.29
Parkersburg ***	Ohio				T.					.05	.43				.80	.40	.50	.24	.27	.02					.12		.02			.06			2.91
Parsons	Monongahela							.50	.20						.30	.20	.15	.25	.20	.15					.30	.30		.05			.01		2.61
Philippi	do					T.		T.	.16			.19			.30	.54	.05	.31	.03	.31	.03				.76	.06	T.	.13		.03	.19		3.09
Pickens	do					T.	T.		.32		.41			.06	.43	.12	.18	.20	.07						.14	.83	.20	.23		.05			3.24
Powlesburg	do					.02	T.			.50		.68		.06	.64		.46		.16	.20					.06	.14	.02	.20	.02		.30		3.46
Saint Marys	Ohio													T.	1.25			.65					.15								.12		2.17
Smithfield	Fishing Creek							T.			.07	.28			.45	T.		.60	.22						.29	T.		.09			.16		2.16
Terra Alta	Monongahela																																
Wellsburg	Ohio										.30	.02		.60	.60		.54	.16	.28									.09		.05			2.64
Weston	Monongahela											.34			.52		.40	.12	.16	T.					.10	.52	.07	.12			.20		2.55
Wheeling	Ohio				T.				T.	.40	.04	.40			.70	.05	.39	.11	.44							.01		.01	T.		.08		2.63
Southern Section.																																	
Bancroft	Great Kanawha				.05	.40		.05		.27		.57			.25	.35	.70	.30							.35		.05	T.					3.34
Beckley	do											.77				1.40	.28	.36										T.					2.81
Bluefield	do													.65	.30	.20	.66								.60								2.41
Charleston	do					.10				.84		.18			.28	.04	.56	.28	.28						.32	.06	.02	.12				.02	3.10
Clay	do				.02									.40	.77	T.	.85	.73	.30						*	*	*	1.05					4.12
Cuba	Sand Creek				.30				.03		.25	.17		.44	.10	1.50	.30	.40							.29	.01	T.						3.79
Dunlow	Big Sandy				.04	.10			1.06	.11	.10				.10	.10	1.43	.40	.20							.10	.04						3.78
Elkhorn	do				.17				.27					.96		1.02	.40	.06						.21	.09							3.18
Green Sulphur Spgs.	Great Kanawha				.20	.20			.07			.06		.03	.48	.30	.58	.01	.22							.13							2.28
Hinton	do					.44			.06			.06			.52	T.	.84		.22						.22	.04				T.			2.40
Holcomb	do				.77					.15	.17				.46	.44		.22							*	*	.95		.35				3.51
Huntington	Ohio							T.		.96	.12	.30			.32	.44	.94	.12	.12						.18	T.		.12		T.	.06		3.68
Lewisburg	Great Kanawha				.60	.38			.40					T.	.89	.17	.44	T.	.21						.30	.18				T.			3.57
Logan	Guyandotte				.27				.32	T.	.15	T.		.15	T.	.38	.93	.25					T.		.10	.15	.24	.16					3.10
Madison	Great Kanawha					.08		T.		.65		.16						.37	.33	.12					.26	.05	.05	.30			.03		2.40
Marlinton	do																																
Pettalburg	do				.20				.65					1.55	T.	.70		.30					T.		.90			T.					4.30
Point Pleasant	Ohio				.01	.04	.04			.24	.06	.40			.48	.46	1.00	.22	.32							.18	.02		.08			.12		3.67
Powellton	Great Kanawha				.03	T.			.07	.13				.61	.12	.31	.60	.90	.05				.22		.30	.10	T.	.30					3.74
Princeton	do																																
Robertsburg	do					.27				.30		.63			.23	.61	.74	.12	.08					.19				.60					3.77
Ivan	do				T.		T.		.72		.57		.40	.14	.14	.54	.32	.34					T.	.46	T	.04	.10		.10	.08		3.95
Spencer	Little Kanawha								.30			.68			.4	.10	.90	.65	.10				.70	T.							.20		4.03
Sutton	Great Kanawha					T.		T.		1.10		.41			.60		.50	T	.10						.45	.12	T.	T.			T.		3.28
Union	do					.77									1.02		.55		.20						.35		.17						3.06
Williamson	Big Sandy								.02		.04				.10	.02	1.10	.02	.32						.10	.02		.26					2.04

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

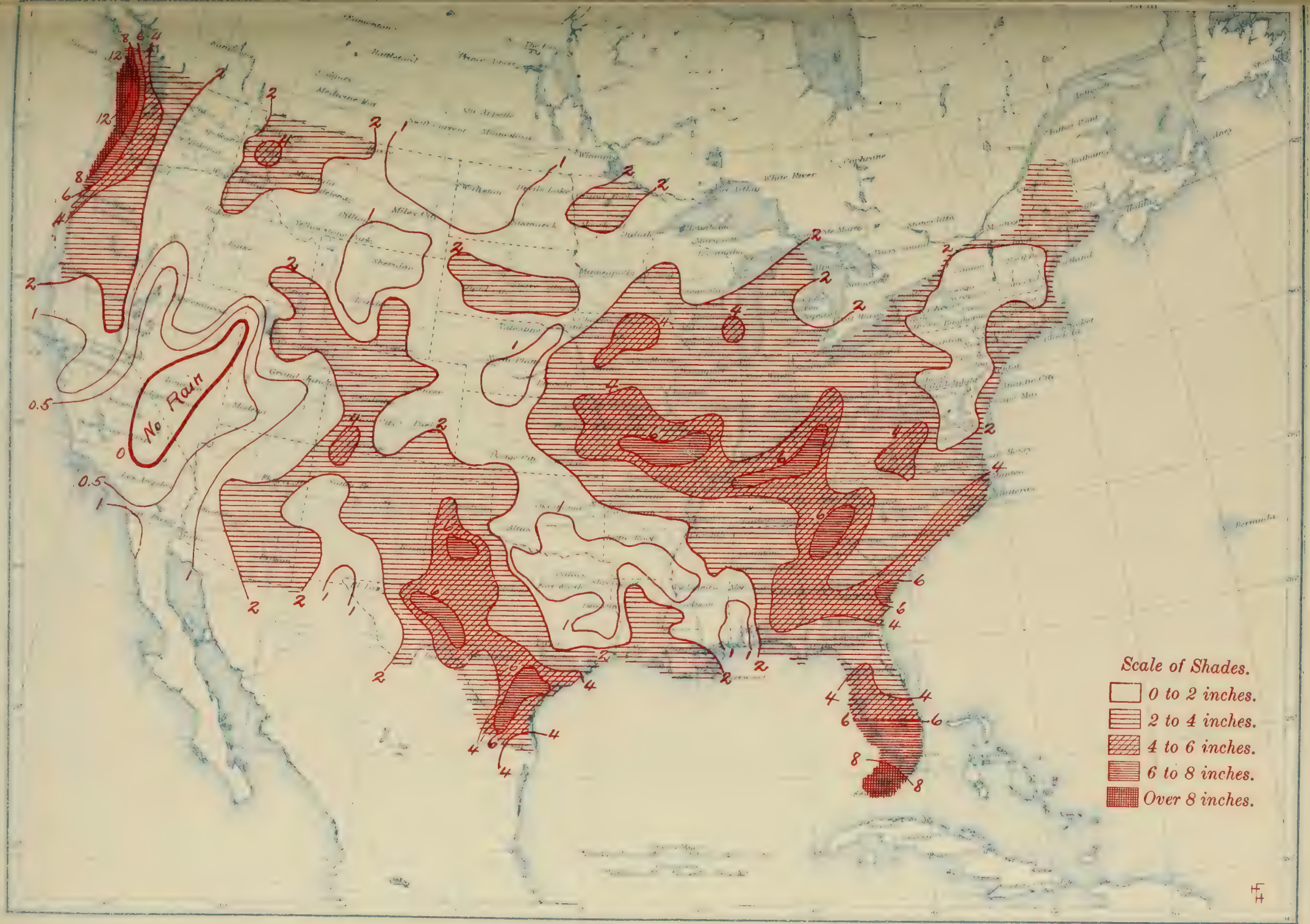
Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

Daily Temperatures for October, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	70	70	70	69	75	76	77	76	79	81	77	68	60	54	55	..	69	56	59	66	69	72	68	62	58	52	47	45	47	49	..	64.7
	Minimum	31	29	28	37	52	43	50	42	47	48	52	36	40	45	45	..	37	44	45	31	33	32	38	40	46	45	23	25	24	35	..	38.7
Burlington	Maximum	70	73	70	71	78	81	74	78	80	86	79	74	65	58	55	70	69	61	67	71	75	75	67	65	58	62	46	53	58	59	65	68.2
	Minimum	35	33	35	48	57	50	57	61	55	55	55	41	45	45	48	52	45	45	44	35	40	42	39	45	48	42	27	26	30	44	38	43.9
Lost City	Maximum	64	68	65	66	70	72	72	76	76	78	74	66	62	61	56	70	66	59	66	64	66	70	64	63	60	58	46	49	50	50	58	64.0
	Minimum	39	37	38	52	56	51	53	57	63	64	60	44	44	50	48	53	46	44	46	40	45	42	48	46	50	45	24	32	32	40	36	46.0
Martinsburg§	Maximum	72	74	72	73	79	80	67	70	80	84	81	77	69	53	63	74	71	63	70	70	74	77	66	64	54	62	44	50	56	60	64	68.2
	Minimum	42	40	42	44	55	55	58	60	60	61	64	51	52	52	49	50	55	48	47	43	45	46	48	50	52	50	32	32	34	38	42	48.3
Moorefield	Maximum	74	74	70	75	80	78	80	82	83	78	82	86	76	78	56	55	68	62	56	68	54	64	72	68	60	54	62	48	56	62	68	68.4
	Minimum	34	38	40	61	68	62	62	64	61	54	70	72	46	44	52	48	52	54	50	54	40	44	52	58	48	40	48	30	28	36	40	50.0
Romney	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Upper Tract	Maximum	74	75	67	65	70	82	79	75	82	79	79	70	59	52	75	..	68	57	59	70	73	75	71	63	60	60	55	55	53	55	66	67.4
	Minimum	35	34	37	49	49	52	55	55	55	55	63	43	48	46	50	..	40	43	46	39	38	39	42	46	45	46	29	23	32	40	36	43.6
Northern Section.																																	
Bens Run	Maximum	81	82	72	78	86	86	85	80	85	85	73	75	69	74	67	69	58	56	69	76	77	81	73	69	62	58	58	53	51	60	64	71.4
	Minimum	45	44	48	49	57	55	57	58	57	64	62	44	53	56	54	56	47	50	46	45	48	47	51	55	49	45	29	31	38	33	34	48.6
Buckhannon	Maximum	72	75	70	75	78	80	80	81	81	82	72	68	68	67	75	70	62	55	64	70	72	76	72	62	59	57	45	49	52	55	59	67.8
	Minimum	33	35	36	44	55	50	52	48	51	52	50	40	44	52	54	55	40	46	46	38	40	38	48	50	48	33	28	22	29	37	27	42.6
Central Station	Maximum	..	..	..	..	90	87	87	89	..	86	81	80	68	74	71	70	60	55	..	..	..	..	..	..	..	..	..	..	..	..	..	..	76.8
	Minimum	..	..	..	..	53	50	51	52	..	52	60	35	45	55	53	57	42	48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50.2
Creston	Maximum	82	84	72	74	89	90	91	87	89	89	72	79	68	73	69	70	63	66	76	79	82	81	77	65	63	66	55	55	53	73	72	74.3
	Minimum	39	40	45	46	54	53	53	54	53	59	61	42	48	55	55	58	43	49	41	40	43	42	48	54	52	48	29	24	79	33	29	45.8
Elkins	Maximum	74	76	70	72	79	80	80	76	83	86	71	72	67	59	70	76	61	50	65	72	73	78	68	60	54	54	33	50	46	52	62	66.7
	Minimum	38	36	38	43	54	50	53	48	53	53	54	43	46	53	56	53	40	47	42	37	41	39	52	52	52	33	27	24	29	37	32	43.7
Fairmont§	Maximum	80	85	73	85	88	87	88	85	87	89	77	80	69	73	73	73	63	54	71	76	76	81	77	61	54	58	39	52	51	60	65	71.9
	Minimum	41	40	41	44	51	52	53	52	54	55	61	42	43	54	54	58	44	46	43	40	41	45	46	52	49	48	29	28	30	38	31	45.3
Glenville	Maximum	76	77	78	76	80	84	85	90	87	84	85	84	69	62	70	75	74	68	70	72	74	70	70	60	60	60	60	55	55	64	68	72.3
	Minimum	39	40	42	41	44	48	47	48	46	47	47	45	56	58	60	60	..	..	..	..	..	..	..	..	..	..	..	..	..	34	28	46.1
Grafton	Maximum	64	74	70	71	71	78	78	78	78	78	74	72	64	70	66	75	73	58	71	74	72	72	70	68	62	58	52	51	51	54	63	68.1
	Minimum	41	40	49	42	51	51	56	50	58	56	63	54	48	55	53	59	44	49	45	40	42	44	48	56	50	49	31	24	30	40	30	46.7
Lost Creek	Maximum	73	76	68	78	80	84	83	81	84	88	75	73	69	68	75	70	62	68	69	75	73	78	72	62	57	60	45	52	51	60	65	70.1
	Minimum	34	32	34	38	49	50	54	50	50	54	61	39	49	45	57	58	41	46	42	37	41	40	47	51	50	45	28	27	30	36	30	43.4
Mannington	Maximum	72	76	70	78	82	81	82	83	84	85	74	70	69	67	71	70	65	55	67	74	74	76	74	64	61	58	45	50	49	58	64	69.3
	Minimum	37	35	38	42	55	47	53	50	51	57	61	39	46	55	53	56	43	49	42	38	39	39	43	52	46	45	28	24	30	35	28	43.8
Morgantown	Maximum	70	77	70	80	81	82	80	82	83	78	72	71	66	61	67	70	66	61	61	71	69	71	77	64	58	56	43	48	51	55	61	67.8
	Minimum	40	50	51	52	59	53	58	61	58	62	61	42	54	53	53	58	42	47	47	44	45	43	55	56	46	42	27	29	39	39	39	48.5
New Cumberland	Maximum	70	77	70	80	85	80	83	84	80	83	75	73	63	66	67	73	61	60	68	74	80	77	73	73	65	50	41	50	48	61	65	69.5
	Minimum	40	37	40	50	65	53	54	53	60	62	60	40	52	52	53	57	48	47	43	42	40	43	45	55	43	38	29	28	40	38	32	46.4
New Martinsville	Maximum	77	82	71	81	87	87	86	83	87	89	78	77	71	72	68	68	65	58	68	77	78	79	76	75	62	59	43	54	51	62	67	72.2
	Minimum	44	43	44	46	55	53	57	55	56	62	61	44	53	57	55	60	53	50	45	44	46	46	51	54	49	42	30	29	35	36	31	47.9
Parkersburg	Maximum	74	80	71	73	83	84	84	79	83	84	73	72	66	70	65	67	56	62	68	75	74	78	72	68	60	57	40	52	50	59	64	69.1
	Minimum	47	47	52	54	56	60	56	59	60	64	52	43	56	57	57	53	49	49	44	44	47	48	56	55	50	39	29	32	42	40	35	49.4
Parsons	Maximum	74	76	70	72	80	81	75	80	85	84	85	72	67	65	69	76	64	63	65	72	73	78	70	61	59	57	45	57	50	55	64	69.2
	Minimum	36	33	33	41	55	48	46	48	55	53	50	44	45	46	52	56	40	44	44	38	37	39	45	48	47	38	26	20	20	32	28	41.5
Philippi	Maximum	66	71	71	78	82	81	82	83	90	87	74	71	68	68	72	71	65	56	66	70	63	67	66	65	57	59	50	50	45	51	62	67.6
	Minimum	36	35	36	42	56	47	52	48	51	57	61	40	46	55	53	60	44	49	42	39	40	47	45	51	50	50	31	25	29	39	30	44.7
Pickens	Maximum	68	72	62	67	73	74	75	74	71	78	76	71	62	65	66	67	57	49	67	79	76	82	76	58	54	52	32	46	48	58	71	65.4
	Minimum	39	42	40	48	52	54	53	52	54	58	48	41	45	51	53	55	37	42	37	40	45	42	52	51	49	32	32	18	33	34	29	43.8
Wellsburg	Maximum	67	..	..	..	78	78	77	79	81	70	70	68	66	64	67	71	60	55	64	68	72	74	70	68	59	52	37	48	47	56	60	65.2
	Minimum	40	.	..	..	58	55	54	59	57	57	58	43	52	50	53	58	47	48	45	46	46	48	48	55	43	36	29	28	25	37	38	47.2
Weston§	Maximum	.	..	70	74	80	82	84	82	84	86	72	70	68	70	74	68	58	56	68	74	72	78	74	62	54	52	28	56	50	58	58	68.0
	Minimum	..	..	..	40	42	52	56	52	54	56	62	44	34	54	56	58	44	48	42	38	44	42	50	54	50	48	28	24	32	38	30	45.4
Wheeling§	Maximum	74	79	78	86	86	84	86	87	84	87	79	78	73	74	71	77	64	61	72	77	78	78	79	74	60	62	53	55	53	63	71	73.6
	Minimum	44	42	42	46	54	54	55	55	56	57	61	44	44	56	55	57	50	49	45	44	44	44	46	48	47	41	31	31	33	37	32	46.6
Southern Section.																																	
Beckley	Maximum	80	78	80	79	81	81	81	76	76	80	72	78	68	67	75	70	68	70	72	75	73	78	71	70	68	61	50	50	55	60	61	71.1
	Minimum	41	40	42	40	45	55	48	43	40	51	45	40	40	47	40	37	38	35	34	40	46	54	40	48	50	48	34	21	35	27	28	41.0
Bluefield	Maximum	75	69	62	..	76	80	79	80	82	82	..	75	..	70	61	69	61	..	66	70	75	75	66	60	..	59	52	52	54	54	66	68.1
	Minimum	40	49	48	..	55	52	55	55	51	56	..	46	..	55	54	58	38	..	36	43	47	43	56	51	..	48	28	22	33	36	30	45.6
Charleston	Maximum	77	78	73	70	84	85	86	78	84	86	75	75	69	68	66	65	63	62	70	78	74	78	70	65	63	61	54	55	51	61	66	70.6
	Minimum	47	48	52	55	58	60	58	58	61	61	60	52	50	58	58	50	47	47	42	48	50	48	53	54	53	53	31	26	38	35	33	49.8
Elkhorn	Maximum	72	73	65	65	76	79	81	78	81	80	77	74	71	63	64	68	61	56	66	70	72	74	69	60	61	58	54	53	55	56	65	67.6
	Minimum	48	50	50	60	53	54	56	56	55	57	60	49	55	58	58	56	43	46	38	44	50	43	56	53	52	48	33	24	34	38	32	48.7
Green Sulphur Spgs.	Maximum	76	76	67	63	77	80	82	78	83	84	77	68	68	60	63	70	63	57	68	72	76	76	68	60	62	59	52	53	52	56	68	68.2
	Minimum	39	46	47	52	53	51	54	52	57	52	56	49	47	53	55	56	36	41	36	37	44	36	53	50	45	48	29	17	29	39	25	44.6
Hinton§	Maximum	79	77	72	66	79	83	88	82	86	85	80	79	68	60	64	71	63	59	69	70	78	77	72	60	64	64	40	57	57	67	69	70.3
	Minimum	43	44	45	54	59	56	56	57	58	55	57	53	52	55	56	58	41	41	41	42	43	45	45	53	52	50	32	26	30	36	29	47.2
Holcomb§	Maximum	76	78	71	73	82	81	83	78	82	85	80	75	68	79	65	73	70	61	71	74	76	81	65	58	56	55	36	53	48	55	67	69.5
	Minimum	35	38	43	46	43	48	50	47	50	51	48	45	44	53	55	53	36	38	37	36	40	36	41	50	47	45	27	18	25	33	25	41.4
Huntington§	Maximum	73	73	70	71	78	80	80	74	78	79	72	68	68	70	63	64	57	60	67	73	71	73	69	66	59	58	42	52	52	58	61	67.1
	Minimum	46	45	48	56	55	55	57	58	59	59	60	50	50	49	58	59	49	56	45	45	48	48	58	54	52	52	30	30	32	39	33	48.9
Lewisburg	Maximum	72	72	64	61	74	77	79	77	80	81	73	72	67	60	61	70	61	56	65	66	74	75	64	60	61	60	49	52	50	54	64	66.2
	Minimum	39	39	47	50	57	53	53	51	59	55	57	45	49	53	53	57	37	44	35	36	42	39	54	50	46	49	28	20	29	29	29	45.0
Madison§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Marlinton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Point Pleasant	Maximum	80	83	74	73	87	90	89	78	83	85	75	74	63	69	65	66	61	63	72	78	77	80	72	71	63	62	47	56	52	63	67	71.7
	Minimum	40	39	52	48	48	59	52	56	58	61	56	42	49	53	55	55	46	43	40	42	47	41	48	53	50	45	25	27	38	33	30	46.2
Powellton	Maximum	78	79	.	74	78	85	83	81	86	86	76	75	71	66	67	67	62	66	70	75	77	75	69	62	61	60	52	51	59	54	65	70.3
	Minimum	48	42	..	51	58	54	56	54	53	55	60	48	47	57	60	56	42	45	42	40	46	47	51	52	55	50	32	22	32	34	28	47.1
Robertsburg§	Maximum	83	82	78	70	90	88	90	80	84	85	73	75	64	70	81	65	56	63	75	85	80	70	74	67	66	61	42	55	52	62	68	72.1
	Minimum	40	39	42	53	50	53	54	56	57	60	56	43	48	42	46	58	47	46	40	42	45	42	50	50	50	51	27	25	30	32	29	45.3
Ryan	Maximum	78	79	74	72	85	85	85	76	83	85	76	74	70	70	65	66	67	62	70	77	77	80	77	66	62	55	47	52	57	60	65	70.9
	Minimum	34	36	58	56	56	53	50	53	53	56	56	54	44	50	56	56	52	46	34	37	42	39	49	46	44	39	29	20	39	29	26	44.9
Spencer	Maximum	79	80	72	70	86	86	89	75	86	88	80	85	70	74	69	63	59	63	70	79	84	70	63	70	63	62	51	59	62	59	70	72.
	Minimum	35	36	40	45	54	52	56	56	54	57	57	40	50	53	54	58	53	49	43	44	42	53	50	55	54	50	28	23	44	42	36	47.0
Union§	Maximum	78	78	71	70	77	78	80	84	84	83	85	78	68	60	64	61	60	75	74	70	75	75	68	57	60	61	44	54	53	58	56	68.
	Minimum	40	39	49	48	53	53	55	57	60	56	55	45	49	54	53	56	50	47	48	39	57	38	50	50	48	47	28	20	25	36	25	45.
Williamson§	Maximum	76	75	69	71	81	83	82	82	80	82	71	73	62	69	60	63	55	57	68	71	75	76	68	61	58	60	41	54	53	56	65	67.
	Minimum	49	49	50	55	54	54	58	58	57	58	59	52	50	50	55	55	45	41	46	48	48	49	48	52	54	52	28	23	24	33	30	47.

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs


No Rain
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

Black

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS
1914

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

NOVEMBER, 1914

BY

HENRY C. HOWE

SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
DECEMBER 19, 1914

Departure of the Mean Temperature from the Normal, November, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXII. PARKERSBURG, W. VA., NOVEMBER, 1914. NO. 11.

GENERAL SUMMARY.

November was characterized by exceptionally fair and dry weather. The sunshine not only much exceeded the amount received during any other November of record but averaged much above the normals for the summer and early fall months. The November precipitation was less in only two years of record. In 1904 and 1908 the precipitation for November averaged 0.64 of an inch and 1.14 inches, respectively. In 1909, however, the average was only 1.34 inches. The temperatures averaged practically normal. The rivers and streams continued exceptionally low and navigation was practically suspended until near the end of the second decade. In many sections drilling operations were suspended for lack of water. The conditions were exceptionally favorable for grazing and outdoor work.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.16 and 30.18 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.64 inches on the 23d, and 29.56 inches on the 15th. Elkins, 30.73 inches on the 24th, and 29.59 inches on the 15th.

TEMPERATURE.

The monthly mean for the State, 44 stations reporting, was 42.6°. The mean departure from the normal for 40 stations having ten or more years of record was minus 0.2°. The first eight days were warm for the season. A cool spell on the 9-10th was followed by abnormally high temperatures from the 13th to the 16th. Unusually cool weather for the season prevailed from the 17th to the 24th. Unseasonably warm weather prevailed during the last six days.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 70 per cent; 8 p. m., 61 per cent. The November averages for the same hours for the past 26 years are 82 and 72 per cent, respectively. Elkins, 8 a. m., 71 per cent; 8 p. m., 57 per cent. The November averages for Elkins for the same hours for the past 14 years are 85 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 55 stations reporting, was 1.32 inches. The mean departure from the normal for 45 stations having ten or more years of record was minus 1.28 inches. The precipitation was favorably distributed over the State and throughout the month. The snowfall was light. Light showers occurred in practically all sections on the 8th and moderate to heavy rain on the 15-16th, attended at a number of stations, also, by snow flurries or light snow. Light snow, averaging generally from 1 to 5 inches, occurred on the 20th, except in the central and eastern portions of the panhandle section. Light rain fell on the 29-30th.

WIND.

The average wind velocity at Parkersburg was 6.3 miles per hour, or 0.2 of a mile above the November average for the past 25 years. The average at Elkins was 5.5 miles per hour, or 1.2 miles above the November average for 15 years. The highest velocity at Parkersburg was 32 miles per hour from the northwest on the 16th, and at Elkins 21 miles per hour from the southeast on the 29th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 68 per cent of the possible amount, or 36 per cent above the November average for 17 years. The average at Elkins was 58 per cent, or 23 per cent above the November average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 3d, 4th, 5th, 10th, and 14th; Charleston, 8th, 14th, and 26th; Elkins, 1st and 14th; Fairmont, 12th; Grafton, 3d, 4th, 5th, 6th, 7th, 8th, 10th, 11th, 12th, 14th, 25th, 26th, 27th, and 29th; Green Sulphur Springs, 15th; Hinton, 1st and 14th; Mannington, 3d; Philippi, 13th and 14th; Rowlesburg, 1st, 3d, and 14th; Wheeling, 1st, 3d, 7th, 10th, 12th, and 18th; Williamson, 5th, 6th, 7th, 10th, 13th, 14th, 19th, 25th, 27th, and 28th.

Halos, lunar: Elkins, 28th; Morgantown, 27th. Parkersburg, 26th; Philippi, 2d, 25th, and 27th; Ryan, 24th and 29th.

Haze: Philippi, 28th.

High winds: Davis, 29th and 30th; Grafton, 13th, 16th, and 17th; Lost Creek, 13th; Mannington, 13th; Parkersburg, 15th and 16th; Pickens, 29th and 30th; Wellsburg, 13th.

Sleet: Wheeling, 8th.

Smoke: Creston, 26th and 27th; Green Sulphur Springs, 6th, 7th, 8th, 24th, 25th, 26th, 27th, 28th, and 29th; Lost Creek, 7th, 12th, 14th, 25th, 26th, 27th, and 28th; Mannington, 26th, 27th, and 28th; Pickens, 7th.

Thunderstorm: Wheeling, 7th.

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in Inches.
1891	42.5	80	8	3.04	....
1892	41.7	81	3	3.10	....
1893	41.4	74	3	2.12	....
1894	39.8	82	5	2.11	....
1895	44.6	87	12	2.35	....
1896	48.1	80	10	3.50	....
1897	45.0	76	13	4.45	....
1898	41.4	75	− 3	2.84	....
1899	45.6	76	14	1.93	T.
1900	45.5	86	9	5.20	2.8
1901	38.0	79	7	2.51	4.3
1902	50.3	83	12	3.27	0.7
1903	38.0	80	− 4	2.46	4.6
1904	41.2	75	9	0.64	1.4
1905	41.8	74	10	2.44	T.
1906	44.2	84	13	2.39	2.2
1907	41.8	74	13	3.40	1.0
1908	43.3	81	0	1.14	5.2
1909	49.1	84	12	1.34	0.2
1910	37.3	75	5	1.95	1.8
1911	40.5	83	7	2.74	2.0
1912	42.8	78	2	1.69	0.9
1913	44.5	82	− 1	4.49	13.4
1914	42.6	84	2	1.32	2.9
Entire period	43.0	87	− 4	2.60	2.7

Climatological Data for November, 1914.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	39.2[b]	+1.0	68[b]	7	2[b]	22	46[b]	1.83	−0.72	0.66	2.0	5	17	4	9	w.	Solomon Clark
Burlington	Mineral	875	20	40.9	−1.5	75	4	8	24	46	1.05	−0.82	0.80	0	2	15	12	3	w.	J. W. Vandiver
Franklin*	Pendleton	641	8	40.7	.....	70	3	13	21	43	1.85*	.....	1.45	0	2	21	8	1	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	2.15	−0.17	2.15	0	1	.....	.....	.....	w.	S. W. Lightner
Lost City	Hardy	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. D. Hinegardner
Martinsburg	Berkeley	435	23	42.6	−0.3	78	4	17	24	42	2.27	+0.07	2.02	0	3	23	3	4	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	45.8	+2.4	76	3†	16	19	32	0.70	−1.03	0.55	T.	2	24	5	1	nw.	John C. Fisher
Romney	Hampshire	824	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	43.3	−0.3	73	3†	9	24	44	1.72	+0.02	1.50	0	2	22	5	3	w.	J. M. Mallow
Averages and	Extremes	.....	.....	42.4	+0.3	78	4	2	22	46	1.62	−0.44	2.15	0.3	2	20	6	4	w.	
Northern Section.																				
Bens Run[f]	Pleasants	622	13	42.4	−0.6	75	7	11	24	41	1.41	−1.16	.....	4.0	....	19	3	2	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	1.24	.....	0.94	.....	2	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	41.9	+0.7	70	3†	10	24	42	1.70	−1.85	0.45	4.5	6	23	2	5	.....	H. A. Darnall
Cairo	Ritchie	674	12	45.8[e]	+2.2	84	5	10[e]	24	41[e]	1.51	−1.14	0.32	3.0	6	10	12	8	.....	Van A. Zevely
Central Station	Doddridge	950	12	.....	.....	79	7	9	.....	.....	1.02	−1.54	.....	2.0	.....	.....	.....	.....	.....	G. W. Sherwood
Cheat Bridge	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	1.95	.....	0.72	.....	6	.....	.....	.....	.....	Franz A. Degler
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	1.13	.....	0.87	.....	2	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	46.6	+3.3	84	2	11	24	49	1.38	−1.03	0.40	4.0	5	12	4	14	w.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	1.66	.....	0.70	4.0	7	14	2	14	sw.	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	1.10	.....	0.30	.....	5	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	41.4	+1.7	71	3	8	24	45	0.73	−2.13	0.39	4.0	7	12	7	11	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	42.3	−0.4	74	7	14	18†	44	1.04	−1.78	0.37	3.0	5	20	1	9	w.	F. P. Hall
Glenville	Gilmer	738	25	44.2	+0.8	74	7	12	24	43	0.80	−2.30	0.22	5.0	4	20	1	9	s.	Joe N. Craddock
Grafton	Taylor	1,000	22	41.6	−1.3	72	7	12	24	43	1.45	−1.60	0.41	3.0	6	18	5	7	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	44.4	+2.4	74	3†	9	24	46	1.09	−1.42	0.48	2.5	5	17	6	7	w.	Allen Smith
Mannington	Marion	974	12	41.9	+1.2	74	7	10	24	46	1.30	−1.13	0.47	2.2	6	17	4	9	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	42.7[a]	−0.6	72	7	15[a]	21	38[a]	1.10	−1.83	0.35	4.0	4	11	10	9	.....	Prof. Edgar L. Andrews
Moundsville*	Marshall	642	12	41.2	−1.7	76	8	18	20†	46	0.68	−1.01	0.40	4.0	3	19[b]	0[b]	9[b]	.....	M. Z. White
New Cumberland	Hancock	987	15	41.6	+0.4	74	7	12	24	46	1.40	−0.36	0.50	T.	3	10	7	13	s.	Frank S. Evans
New Martinsville	Wetzel	634	21	44.0	−0.4	76	7	14	24	43	1.37	−1.29	0.41	4.0	4	19	4	7	s.	Wm. Ankrom
Osceola	Randolph	3,600	0	.....	.....	.....	.....	.....	.....	.....	1.20	.....	0.60	.....	4	.....	.....	.....	w.	A. T. Dohmer
Parkersburg	Wood	638	26	45.4	+2.2	76	7	16	20	38	0.80	−2.03	0.30	0.8	6	15	7	8	sw.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	40.6	−0.6	71	3†	5	24	48	1.15	−1.38	0.43	1.0	6	13	13	4	.....	J. W. Swisher
Philippi	Barbour	1,149	22	40.2	−2.9	70	7†	11	18†	42	1.32	−1.69	0.42	3.0	6	14	8	8	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	41.7	+1.1	75	3	8	21	46	1.99	−1.86	0.58	7.0	6	16	5	9	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	1.56	−1.52	0.90	1.2	7	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	0.50	.....	0.25	2.0	3	.....	.....	.....	e.	J. O. Goodman
Smithfield	Wetzel	835	10	43.1	.....	78	13	8	24	46	1.67	−1.10	0.55	6.5	5	16	6	8	w.	G. M. Whisler
Terra Alta	Preston	2,612	14	38.0	−4.1	71	7	7	24	39	1.50	−1.78	0.65	4.0	4	15	0	15	.....	H. C. Shaffer
Wellsburg	Brooke	1,225	20	40.6	−0.5	70	7	15	18	35	1.83	−0.23	0.47	4.5	6	14	9	7	w.	C. P. Waugh
Weston	Lewis	1,026	26	43.8	+0.6	76	7	12	24	40	1.04	−2.38	0.46	4.6	6	19	7	4	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	42.3	.....	77	7	12	24†	49	1.25	−1.20	0.41	2.9	8	16	5	9	s.	Miss M. B. Forsyth
Averages and	Extremes	.....	.....	42.6	+0.2	84	2†	5	24	49	1.30	−1.49	0.90	3.3	5	16	6	8	w.	
Southern Section.																				
Bancroft	Putnam	574	11	43.6	−1.5	76	3	12	21	45	1.05	−1.41	0.30	3.0	5	17	2	11	ne.	R. E. Dent
Beckley*	Raleigh	2,440	15	42.8	+0.6	72	13	11	20†	46	0.95	−1.61	0.50	2.0	3	19	3	8	w.	John A. Ewart
Bluefield	Mercer	2,558	20	43.0[f]	−1.4	71[f]	3†	12[f]	20†	39[g]	1.47	−1.04	0.50	5.0	5	18	6	6	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	47.0	−1.0	78	7	17	21	40	1.12	−1.84	0.34	5.0	6	15[b]	5[b]	8[b]	w.	R. C. Hewes
Clay		706	0	43.7[a]	.....	78[a]	7	11	24	46[a]	1.30	.....	0.45	4.5	4	23[a]	3[a]	3[a]	.....	Prof. E. H. Knabenshue
Cuba	Jackson	650	14	43.8	+0.5	77	7	12	18	44	1.42	−0.78	0.59	2.0	5	10	17	3	w.	C. T. Perry
Dunlow	Wayne	717	7	.....	.....	77	11	.....	.....	.....	1.66	.....	0.40	3.0	9	15	9	6	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	45.4	−0.3	73	7	13	21	37	1.42	−1.27	0.52	3.0	5	12	10	8	w.	J. J. Lincoln
Evans	Jackson	606	0	.....	.....	.....	.....	.....	.....	.....	1.40	.....	0.49	3.0	5	16	2	12	.....	B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	41.2	−2.4	73	4†	9	24	44	1.54	−0.60	0.68	5.0	6	20	2	8	w.	Arthur George
Hinton	do	1,450	25	41.2	−3.3	77	4	11	21	47	1.24	−0.99	0.66	1.0	6	16	5	9	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	38.9	.....	73	3	4	24	47	1.06	.....	0.46	4.0	3	15	1	14	.....	R. E. Ferguson
Huntington	Cabell	538	19	44.0	+0.4	74	7	16	20†	36	1.00	−1.78	0.24	2.0	5	19	4	7	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	40.8	−0.5	71	4	9	24	41	0.99	−1.56	0.47	1.0	4	15	11	4	nw.	Geo. T. Argabrite
Logan	Logan	687	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. J. E. McDonald
Madison	Boone	704	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. J. McCarty
Nuttallburg	Fayette	2,252	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	45.4	+0.4	78	3†	13	20†	46	1.14	−1.71	0.26	2.0	7	17	2	11	sw.	W. D. Holmes
Powellton	Fayette	933	17	44.8	+0.4	76	4†	15	21	43	.....	.....	.....	4.2	....	18	0	3	.....	Morris Hansford
Robertsburg	Putnam	574	14	42.8	−0.6	75	7†	12	21	43	1.14	−1.23	0.50	1.0	5	12	3	15	.....	E. C. Brace
Ryan	Roane	700	11	42.2	−1.0	78	3	9	24	50	1.07	−1.26	0.46	4.6	5	15	7	8	.....	Wm. E. Ryan
Spencer*	do	784	16	46.0	.....	82	4†	10	24	51	1.73	−0.61	0.65	4.0	4	8	18	4	.....	A. M. McKown
Sutton	Braxton	839	11	.....	.....	78[g]	3	.....	.....	.....	1.40	−1.67	0.50	5.0	3	17	12	1	.....	Ben Gillespie
Union	Monroe	2,250	10	39.4	−0.7	72	4	7	21	43	1.61	−0.47	0.51	3.0	5	.....	.....	.....	.....	Shelton Clark
Williamson	Mingo	660	13	41.0	−4.4	74	4†	14	20†	45	0.94	−1.83	0.28	2.0	6	19	5	6	w.	J. F. Keyser
Averages and	Extremes	.....	.....	42.8	−1.0	82	4†	4	24	50	1.26	−1.30	0.68	3.2	5	16	6	8	w.	
State Averages and	Extremes	.....	.....	42.6	−0.2	84	2†	2	22	50	1.32	−1.28	2.15	2.9	5	16	6	8	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries

Daily Precipitation for November, 1914.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac									.58						.66	.29				.06										.24		1.83
Burlington	do								T.							.80														T.	.25		1.05
Franklin	do								.40							1.45														T.	T.		1.85
Harpers Ferry	do									T.						2.15																	2.15
Lost City	do																																
Martinsburg	do								.15							2.02															.10		2.27
Moorefield	do								T.						T.	.55					T.										.15		0.70
Romney	do																																
Upper Tract	do															1.50															.22		1.72
Northern Section.																																	
Bens Run	Ohio								.30							.28	.13				.21					*	*	*	*	*	.49		1.41
Brandonville	Monongahela																.94														.30		1.24
Buckhannon	do								.10	.25						.40	.20	T.			.45										.30		1.70
Cairo	Little Kanawha									.20						.22	.24				.30		.23								.32		1.51
Central Station	Middle Is. Creek								.19	.03						.13	*	*	*	*	*	*	*	.40	*	*	*	*	*	T.	.27		1.02
Cheat Bridge	Monongahela									.35						.72	.26	.10	T.		.20									T.	.32		1.95
Cortland	do																.87														.26		1.13
Creston	Little Kanawha									.20						.14	.36				.40									T.	.28		1.38
Davis	Monongahela									.05						.33	.70	.10			.15	.10		T.	T.						.23		1.66
Elizabeth	Little Kanawha									.22					.26		.20				.30										.12		1.10
Elkins***	Monongahela		T.						.17	.01					.04	.18	.23	T.			.07									T.	.03		0.73
Fairmont	do									.37						.13	.22	T.			.15	T.									.17		1.04
Glenville	Little Kanawha									.20					.22		T.				.22										.16		0.80
Grafton	Monongahela								.08	.36						.41	.15			T.	.30										.15		1.45
Lost Creek	do								.38	.10						.25					.18									T.	.18		1.09
Mannington	do								.21	.05						.22	.20				.15										.47		1.30
Morgantown	do								.30							.15					.30										.35		1.10
Moundsville †	Ohio								T.								.02				.40										.26		0.68
New Cumberland	do								.50					T.		.50	T.				T.										.40		1.40
New Martinsville	do								.36							.20					.40										.41		1.37
Osceola	Monongahela																.60				.10	.20				T.					.30		1.20
Parkersburg ***	Ohio								.18						T.	.30	T.			.02	.04									.18	.08		0.80
Parsons	Monongahela								.10	.12						.25	.43				.10										.15		1.15
Philippi	do								.06	.33						.42	.24				.25							T.			.02		1.32
Pickens	do								.11	.23						.47	.58	.10			.50		T.							T.			1.99
Rowlesburg	do									.30						.12	.90	.04			.06	.06									.08		1.56
Saint Marys	Ohio																	.05			.20										.25		0.50
Smithfield	Fishing Creek									.22						.08	.42				.55										.40		1.67
Terra Alta	Monongahela							.25	T.	T.						.65	T.				.40										.20		1.50
Wellsburg	Ohio								.38					.02		.47	.13				.40										.43		1.83
Weston	Monongahela									.12						.22	.10				.30	.16									.14		1.04
Wheeling	Ohio		T.						.01	.28					.01	.18	.23	.01		T.	.28	T.									.25		1.25
Southern Section.																																	
Bancroft	Great Kanawha									.22						.24	.24	T.			.30									.05			1.05
Beckley	do								.25							.50					.20												0.95
Bluefield	do								.30						.02	.18					.50										.47		1.47
Charleston	do									.26						.10	.34				.32									.06	.04		1.12
Clay †	do									.25							.40				.45										.20		1.30
Cuba	Sand Creek								T.							.59	.18				.20						T.			.25	.20		1.42
Dunlow	Big Sandy			.10		.07						.22				.10	.40			T.	.30	.28								.12	.07		1.66
Elkhorn	do								.37						.21	.52	.02				.30									T.	T.		1.42
Evans †									.25							.49	.22			T.	.22										.22		1.40
Green Sulphur Spgs.	Great Kanawha									.11					.55	.13					.50									.10	.15		1.54
Hinton	do									.10						.66	.10				.12	T.								.10	.16		1.24
Holcomb	do								.30	T.						.46					.30									T.			1.06
Huntington	Ohio									.24						.12	.20				.20									T.	.24		1.00
Lewisburg	Great Kanawha								.10						T.	.47					.10									T.	.32		0.99
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do																																
Nuttallburg	do																																
Point Pleasant	Ohio								.02	.22						.22	.26				.20									.02	.20		1.14
Powellton	Great Kanawha																				.42									.07	.02		++
Princeton	do																																
Robertsburg	do									.22						.20	.50				.06										.16		1.14
Ryan	do								.28							.14					.46									.13	.06		1.07
Spencer	Little Kanawha															.42	.26				.40										.65		1.73
Sutton	Great Kanawha									.40						.50					.50												1.40
Union	do									.20						.20	.40				.30										.51		1.61
Williamson	Big Sandy									.24						.04	.18				.20	T.								.26	.02		0.94

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

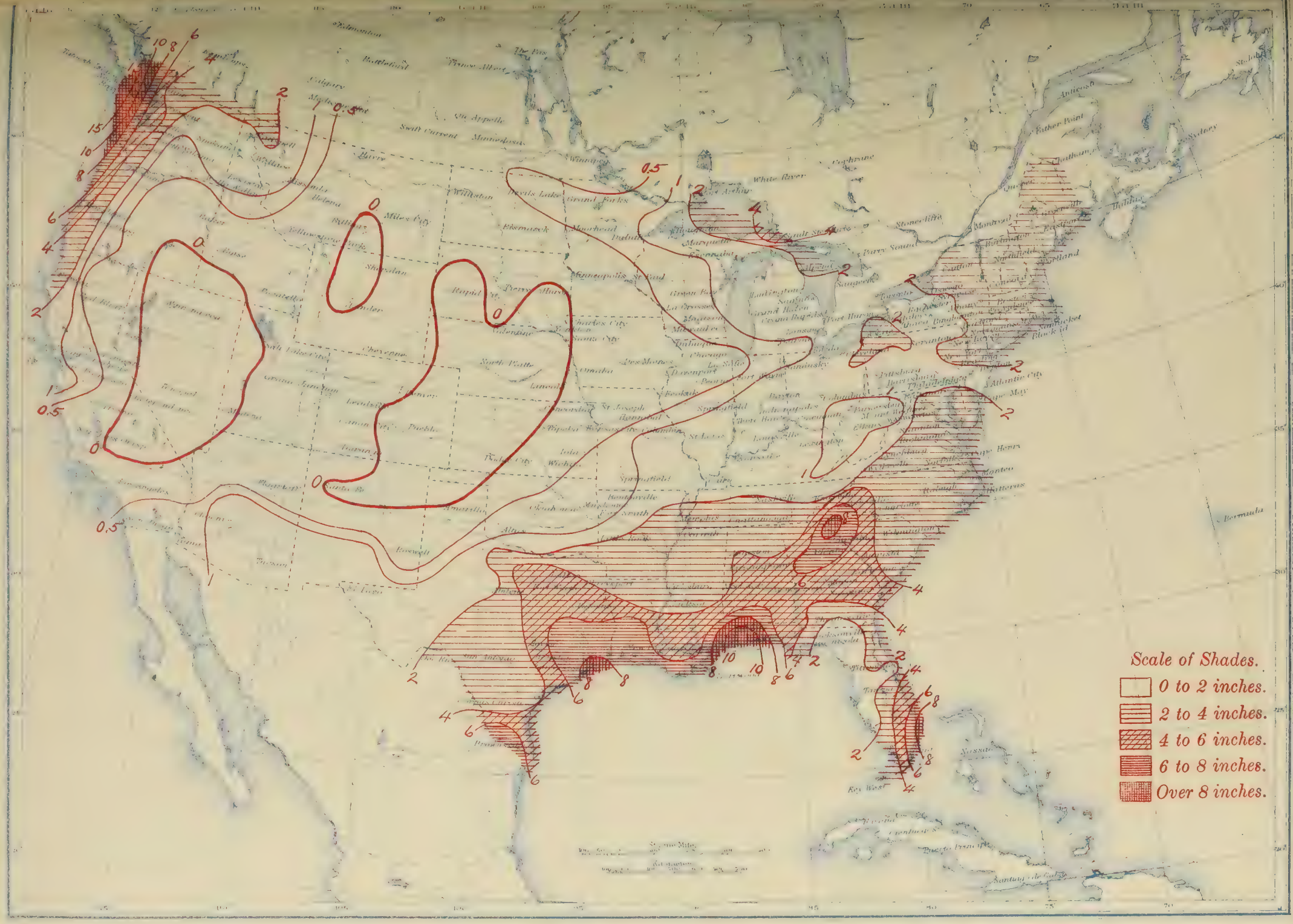
T Trace, or less than 0.01 inch. † Readings are made as follows: Moundsville, 9 a. m.; Clay, 8:45 a. m.; Evans, 6 p. m.

Daily Temperatures for November, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	..	60	67	67	64	47	68	67	56	47	55	55	61	62	54	55	29	36	42	37	26	46	46	..	50	50	55	52	45	54	..	51.9
	Minimum	..	23	28	53	39	35	22	24	28	13	28	29	30	27	38	29	15	8	14	15	11	2	18	..	37	46	41	20	33	35	..	26.5
Burlington	Maximum	68	68	70	75	59	54	68	74	44	49	57	60	70	58	52	53	54	40	42	30	37	45	39	47	61	65	58	49	40	51	..	54.6
	Minimum	26	40	40	29	49	33	28	40	24	15	26	30	30	28	40	28	23	14	18	19	18	18	19	8	24	36	35	23	29	36	..	27.2
Lost City	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Martinsburg§	Maximum	72	69	66	78	60	55	62	70	45	47	57	60	70	55	53	50	38	38	41	33	37	46	37	42	60	67	58	48	47	52	..	53.9
	Minimum	34	35	36	38	51	41	29	30	34	23	23	32	33	37	38	44	26	20	22	28	22	23	28	17	18	30	56	30	31	35	..	31.4
Moorefield	Maximum	70	72	76	72	70	74	76	70	58	44	56	58	55	48	48	48	36	34	24	28	30	46	44	44	46	58	62	68	60	58	..	54.4
	Minimum	38	40	48	46	46	46	48	48	44	22	42	40	36	32	42	36	24	24	16	18	20	30	32	28	24	46	50	56	48	52	..	37.3
Upper Tract	Maximum	67	65	73	73	68	54	70	70	60	58	54	63	68	65	53	60	38	39	45	38	36	44	40	53	56	63	59	54	47	48	..	56.0
	Minimum	28	43	33	34	46	40	28	54	30	16	42	25	43	30	40	36	20	13	25	22	16	27	23	9	30	28	45	25	32	35	..	30.6
Northern Section.																																	
Bens Run	Maximum	68	67	74	69	56	58	75	66	46	53	42	62	67	73	63	58	35	41	43	29	31	40	39	52	..	..	..	..	..	..	..	54.5
	Minimum	33	45	36	46	39	40	36	34	32	16	27	29	44	33	50	28	23	14	23	17	20	21	19	11	..	..	..	..	..	..	..	30.2
Buckhannon	Maximum	62	64	70	70	62	57	70	67	46	50	52	58	55	66	66	63	32	37	47	35	32	39	35	50	54	58	53	64	63	69	..	54.9
	Minimum	29	42	28	45	34	33	30	39	32	20	31	23	35	31	51	23	19	12	20	14	15	16	18	10	30	30	34	27	44	52	..	28.9
Central Station	Maximum	..	72	..	75	65	62	79	70	44	59	59	64	69	70	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	70	..	65.9
	Minimum	..	45	..	29	35	31	30	33	32	20	35	25	42	30	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	49	..	34.7
Creston	Maximum	77	84	78	83	73	62	78	77	45	64	70	70	76	72	64	59	51	51	60	35	36	45	55	59	62	62	65	60	65	77	..	63.8
	Minimum	28	41	32	42	30	32	35	40	36	23	32	25	35	32	52	32	23	13	18	18	17	19	16	11	31	30	80	27	40	36	..	29.5
Elkins	Maximum	64	62	71	68	51	51	70	67	37	53	50	60	65	62	65	57	30	41	46	30	33	37	31	53	53	58	54	58	55	65	..	53.2
	Minimum	26	38	30	44	42	31	30	33	28	19	33	26	45	31	51	21	17	11	25	14	16	28	14	8	33	31	36	27	47	53	..	29.6
Fairmont§	Maximum	67	69	73	72	59	59	74	69	46	52	56	61	67	72	64	44	35	41	49	22	35	40	39	54	57	21	56	62	64	71	..	56.3
	Minimum	28	34	30	43	35	32	30	38	33	24	24	26	27	32	33	39	20	14	15	20	17	20	19	14	14	56	46	29	29	49	..	28.3
Glenville	Maximum	72	72	72	72	68	62	74	67	48	52	55	65	68	68	66	62	44	38	50	50	35	40	40	48	66	61	55	58	64	68	..	58.7
	Minimum	29	43	32	40	30	31	34	43	37	24	30	25	36	31	50	36	23	14	19	20	17	19	17	12	30	30	22	27	38	48	..	29.7
Grafton	Maximum	64	63	70	70	65	50	72	70	39	45	48	57	63	63	62	60	32	43	50	46	30	40	37	51	54	50	50	58	57	62	..	54.0
	Minimum	30	40	32	40	32	30	29	39	33	21	30	22	34	31	50	32	22	13	18	18	16	17	20	12	24	27	33	39	40	50	..	29.1
Lost Creek	Maximum	67	69	74	70	71	70	74	70	65	50	57	63	69	68	65	59	32	42	50	36	33	40	38	53	57	61	55	61	66	71	..	58.5
	Minimum	26	47	28	38	39	29	33	35	35	20	36	24	39	29	53	32	22	11	15	17	16	18	15	9	39	38	45	26	46	53	..	30.4
Mannington	Maximum	66	67	73	71	60	56	74	70	41	51	55	59	67	70	64	57	35	40	47	35	31	40	36	51	57	61	57	61	62	66	..	56.0
	Minimum	26	40	29	37	33	28	28	33	32	20	30	22	35	28	49	29	21	11	16	19	17	13	15	10	29	29	45	23	39	48	..	27.8
Morgantown	Maximum	63	63	70	68	55	52	72	65	39	48	50	57	64	69	57	57	32	37	46	46	28	37	35	49	55	59	54	56	53	66	..	53.4
	Minimum	35	49	34	53	40	37	34	33	32	..	40	33	51	31	46	27	20	17	27	17	15	26	20	16	42	44	46	29	44	47	..	34.0
New Cumberland	Maximum	67	61	70	68	56	50	74	66	43	46	54	56	60	62	55	57	35	48	40	32	28	38	33	47	57	61	57	54	59	60	..	53.1
	Minimum	37	41	29	46	38	38	28	33	32	22	34	28	30	30	44	27	18	14	27	18	18	22	18	12	34	42	43	19	37	48	..	30.2
New Martinsville	Maximum	69	69	73	71	60	59	76	63	44	54	56	63	67	71	63	59	38	42	44	35	33	42	39	51	59	62	56	56	64	64	..	56.8
	Minimum	31	44	33	43	35	31	33	34	35	25	35	27	43	32	52	29	22	15	23	18	21	20	19	14	33	35	40	29	38	50	..	31.3
Parkersburg	Maximum	68	66	75	68	57	57	76	67	42	52	54	63	68	70	62	59	35	39	41	25	36	41	37	51	59	62	54	54	64	70	..	55.7
	Minimum	34	44	37	49	42	42	42	34	33	27	41	34	44	39	53	26	24	17	22	16	22	30	22	20	42	46	40	34	45	51	..	35.1
Parsons	Maximum	60	62	71	64	70	65	71	68	50	52	63	66	68	70	65	50	32	45	47	34	30	34	37	53	55	58	57	62	63	67	..	56.3
	Minimum	24	32	27	32	31	25	31	33	30	17	20	29	30	29	38	29	19	9	20	15	15	13	16	5	23	24	31	28	37	39	..	24.9
Philippi	Maximum	52	57	66	66	61	55	70	70	40	52	41	50	59	68	61	58	31	35	43	41	31	35	35	40	51	54	55	59	55	62	..	51.5
	Minimum	26	42	29	41	36	32	28	39	32	20	26	24	37	29	50	31	22	11	16	19	12	19	18	11	34	32	42	23	39	50	..	29.0
Pickens	Maximum	72	68	75	74	58	55	70	66	39	58	56	61	67	64	63	56	35	44	37	27	33	38	34	55	53	57	51	66	57	63	..	55.1
	Minimum	32	34	35	47	32	35	35	32	29	19	19	26	40	37	50	21	14	11	24	11	8	22	10	9	24	29	37	33	45	50	..	28.3
Terra Alta	Maximum	60	64	70	68	68	66	71	67	52	40	49	58	60	62	64	56	34	34	42	36	32	30	38	46	42	43	45	46	47	48	..	51.3
	Minimum	32	36	38	36	37	33	35	29	24	16	24	33	34	30	32	24	14	12	18	15	12	10	12	7	20	22	24	25	26	27	..	24.6
Wellsburg	Maximum	62	57	66	63	53	49	70	66	38	45	50	56	58	60	55	51	31	34	40	30	27	35	31	44	52	52	54	52	57	58	..	49.9
	Minimum	38	40	34	49	37	36	35	32	32	25	36	32	39	32	45	26	19	15	24	17	17	18	16	17	35	42	36	27	40	48	..	31.3
Weston§	Maximum	66	64	72	70	56	64	76	74	44	46	54	64	68	66	64	44	32	44	50	30	34	36	40	50	56	60	62	64	66	70	..	56.2
	Minimum	28	46	32	46	34	34	36	58	34	24	26	28	40	34	50	38	22	14	18	16	14	18	20	12	30	32	36	38	40	42	..	31.3
Wheeling§	Maximum	72	70	76	74	61	60	77	54	44	49	60	64	64	70	60	44	38	40	44	27	34	42	41	49	61	65	59	60	61	64	..	56.1
	Minimum	32	35	34	35	35	31	32	35	35	28	28	29	31	30	31	40	20	16	16	20	19	22	20	12	12	36	45	27	27	42	..	28.5
Southern Section.																																	
Beckley	Maximum	69	68	68	70	69	64	70	70	57	61	66	70	72	69	70	55	42	38	50	50	49	51	35	58	60	61	60	55	50	59	..	59.5
	Minimum	28	29	31	32	37	37	38	32	22	24	28	25	26	34	35	30	22	13	15	11	11	16	15	15	20	21	32	31	39	34	..	26.1
Bluefield	Maximum	..	65	71	71	67	57	71	66	..	52	55	65	63	57	..	50	34	40	45	38	30	..	43	54	49	..	59	53	..	60	..	54.8
	Minimum	..	34	36	50	45	41	40	..	41	23	40	30	44	37	..	33	16	16	29	12	12	..	22	15	34	..	35	37	..	38	..	31.2
Charleston	Maximum	63	70	77	76	64	65	78	71	44	58	61	70	72	67	75	64	42	42	48	39	39	45	41	58	60	65	57	60	64	74	..	60.3
	Minimum	35	44	38	46	34	35	42	42	37	27	35	30	38	38	54	42	24	18	26	18	17	27	19	18	32	32	34	30	41	54	..	33.6
Elkhorn	Maximum	67	68	72	72	70	60	73	69	60	54	56	65	66	61	63	62	40	44	47	44	38	47	43	53	51	58	56	54	56	65	..	57.8
	Minimum	35	42	35	45	40	36	42	46	36	25	36	28	35	39	42	40	20	18	32	15	13	24	20	21	30	32	33	38	44	51	..	33.1
Green Sulphur Spgs.	Maximum	66	67	62	73	62	58	73	69	48	55	56	64	68	59	60	58	40	41	49	37	36	45	39	48	53	60	56	53	51	60	..	55.5
	Minimum	23	35	37	37	28	32	32	45	34	18	26	20	25	29	40	32	20	11	23	16	15	19	17	9	20	23	24	28	39	48	..	26.8
Hinton§	Maximum	70	71	74	77	62	61	74	71	42	56	56	66	71	55	59	50	36	40	50	26	38	48	41	48	54	60	50	54	55	58	..	55.8
	Minimum	30	32	34	35	34	32	34	35	35	22	24	24	24	31	35	40	21	15	17	18	11	17	18	13	14	24	26	28	33	40	..	26.5
Holcomb§	Maximum	67	66	73	72	56	57	65	69	38	55	57	64	66	68	63	44	40	36	49	22	30	40	36	51	53	58	55	54	56	66	..	54.2
	Minimum	35	25	29	31	26	26	32	35	30	20	23	22	28	29	32	35	24	10	14	14	8	11	12	4	14	25	26	25	22	41	..	23.6
Huntington§	Maximum	66	68	73	71	59	58	74	68	44	54	56	65	68	66	67	41	35	40	42	27	38	44	37	51	56	62	55	56	60	69	..	55.7
	Minimum	33	40	37	50	41	41	40	43	38	27	29	31	32	38	38	39	24	19	19	16	16	21	20	19	21	36	38	35	36	50	..	32.2
Lewisburg	Maximum	64	66	70	71	66	56	70	67	53	51	54	62	64	59	58	56	34	37	45	39	34	44	41	47	51	53	57	49	46	55	..	54.0
	Minimum	26	41	29	41	41	39	32	38	32	19	28	22	25	31	47	33	18	11	23	15	10	20	20	9	20	23	26	30	34	45	..	27.6
Madison§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Marlinton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Point Pleasant	Maximum	70	71	78	74	62	62	78	73	46	56	60	68	72	70	70	64	38	43	43	31	39	44	42	54	60	63	55	61	62	72	..	59.3
	Minimum	29	42	32	48	34	35	35	35	34	24	39	27	44	30	52	30	30	15	25	13	18	28	15	13	38	34	32	28	34	50	..	31.4
Powellton	Maximum	71	71	72	76	67	60	76	72	..	..	..	..	..	..	..	..	..	44	51	36	37	45	39	49	55	62	60	58	57	70	..	58.5
	Minimum	28	41	34	46	34	35	39	42	..	..	..	..	..	..	..	..	..	16	21	17	15	25	21	16	30	30	31	30	46	54	..	31.0
Robertsburg§	Maximum	68	68	74	73	63	65	75	68	45	55	55	68	70	70	75	40	37	44	43	26	38	44	42	54	60	62	55	60	64	73	..	57.8
	Minimum	31	31	33	35	32	33	37	44	36	24	28	27	32	32	32	38	22	14	18	15	12	18	16	14	18	30	32	28	30	44	..	27.9
Ryan	Maximum	68	69	78	74	60	61	77	62	45	54	63	66	70	70	64	48	35	31	47	34	45	35	37	55	57	62	54	62	63	73	..	57.3
	Minimum	25	38	28	38	26	46	33	41	36	20	26	23	32	29	39	32	20	10	17	13	15	15	12	9	26	24	26	26	40	48	..	27.1
Spencer§	Maximum	73	71	78	82	80	78	82	80	76	60	63	65	74	72	70	45	38	44	52	37	38	42	42	55	60	70	55	64	68	74	..	62.9
	Minimum	27	32	32	43	29	33	44	54	40	21	35	23	35	34	44	38	21	11	19	17	14	19	13	10	30	29	28	25	39	38	..	29.2
Union§	Maximum	60	68	71	72	60	62	65	70	42	52	57	63	65	66	67	40	38	35	36	21	38	42	38	43	52	58	56	58	59	60	..	53.8
	Minimum	28	30	28	36	39	32	31	32	34	19	28	22	29	32	38	32	10	11	11	15	7	12	14	9	12	28	27	33	34	39	..	25.1
Williamson§	Maximum	66	69	73	74	61	63	74	70	38	55	56	66	67	63	68	47	35	41	44	22	36	44	39	53	52	57	48	56	58	68	..	55.4
	Minimum	30	35	36	37	33	33	33	36	35	26	21	21	22	31	36	39	20	15	15	14	14	14	18	15	15	22	22	28	31	49	..	26.5

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation. Inches. November. 1914.



UNIVERSITY OF ILLINOIS
LIBRARY

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

OF THE
UNIVERSITY OF ILLINOIS
27 FEB 1915

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

DECEMBER, 1914

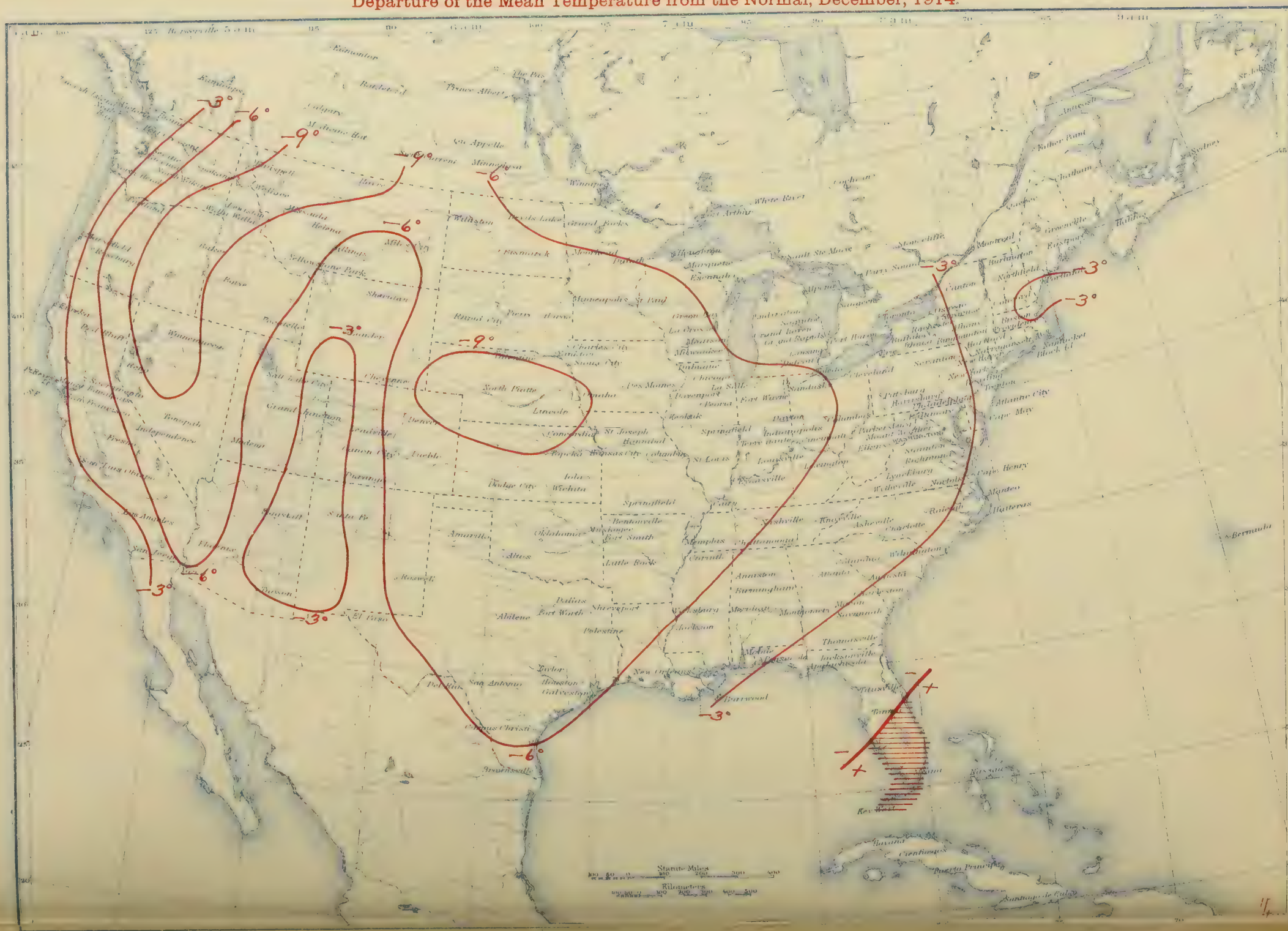
BY

HENRY C. HOWE

SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
FEBRUARY 11, 1915

Departure of the Mean Temperature from the Normal, December, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXII. PARKERSBURG, W. VA., DECEMBER, 1914. NO. 12.

GENERAL SUMMARY.

The past month was the wettest December on record, except in 1901. In many sections the previous December records were broken. The average snowfall, 12.5 inches, also exceeded previous December records, except in 1910. The December temperatures averaged lower only in 1903, 1909, and 1910, and lower temperatures were recorded in December in only 1894. In 1904, however, a temperature of 20° below zero was also recorded. Unusually cloudy weather prevailed. The ground was well protected by snow during the two cold periods of the month.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.19 and 30.20 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.72 inches on the 17th, and 29.58 inches on the 29th. Elkins, 30.71 inches on the 16th, and 29.59 inches on the 13th.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 30.3°. The mean departure from the normal for 40 stations having ten or more years of record was minus 3.8°. The month opened abnormally warm and the temperatures continued above the normal until the 9th. Colder weather set in on the 10th and a severe cold wave prevailed from the 14th to the 18th, with the temperatures ranging generally from zero to 20° below zero on the 15th and 16th. Readings near or slightly above the normal were recorded on the 19th, 20th, and 21st, followed by much colder weather until the 29th. On the 26th and 27th the temperatures again ranged generally from near zero to 15° below zero, the lowest readings of the month occurring in sections of the eastern and southern counties. While the 29th and 30th were seasonably warm, much colder weather set in on the 31st.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 86 per cent; 8 p. m., 81 per cent. The December averages for the same hours for the past 26 years are 83 and 76 per cent, respectively. Elkins, 8 a. m., 88 per cent; 8 p. m., 84 per cent. The December averages for Elkins for the same hours for the past 14 years are 85 and 79 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 56 stations reporting, was 5.46 inches. The departure from the normal for 46 stations having ten or more years of record was plus 2.37 inches. Precipitation occurred practically daily in nearly all sections from the 1st to the 15th, with snowfall ranging generally from 8 to 12 inches from the 10th to the 14th. At Pickens, however, during that period the snowfall was 22 inches. The rainfall on the 4–5th was moderately heavy. A fall of 4 inches was received at Wheeling for the 24 hours ending at 8 a. m. of the 5th. Moderate to heavy rain, with snow in a few sections, again occurred from the 19th to the 21st, and from 2 to about 12 inches of snow was received on the 24–25th. Moderate rain fell on the 29th in nearly all sections.

WIND.

The average wind velocity at Parkersburg was 5.5 miles per hour, or 0.7 of a mile below the December average for the past 25 years. The average at Elkins was 4.1 miles per hour, or 0.7 of a mile below the December average for 15 years. The highest velocity at Parkersburg was 24 miles per hour from the northwest on the 30th, and at Elkins 24 miles per hour from the southwest on the 30th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 22 per cent of the possible amount, or 4 per cent below the December average for 17 years. The average at Elkins was 22 per cent, or 7 per cent below the December average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 16th; Davis, 8th; Fairmont, 28th; Glenville, 3d, Grafton, 2d, 3d, 18th, and 19th; Green Sulphur Springs, 2d, 3d, 6th, 7th, 8th, 9th, and 10th; Huntington, 17th; Philippi, 3d; Pickens, 2d, 24th, and 30th; Robertsburg, 1st, 2d, and 16th; Wheeling, 17th, 18th, and 23d.

Hail: Powellton, 9th.

Halos, lunar: Parkersburg, 27th, Elkins and Upper Tract, 28th; Philippi, 26th, 27th, and 28th.

Halo, solar: Wellsburg, 28th.

Haze: Bayard, 20th and 28th.

Sleet: Bayard, 5th, 6th, 7th, 8th, 9th, 10th, 21st, 22d, and 29th; Burlington, 6th and 7th; Davis, 5th, 6th, and 7th; Elkins, 6th and 9th; Lost City, 7th, 8th, 9th, and 20th; Parkersburg, 20th; Pickens, 30th; Philippi, 29th; Wheeling, 5th and 6th; Upper Tract, 5th.

Thunderstorms: Point Pleasant and Lewisburg, 9th.

COMPARATIVE DATA FOR DECEMBER.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in inches.
1891	40.9	75	6	3.27	....
1892	34.1	72	−10	2.91	....
1893	37.1	76	7	2.05	....
1894	36.3	80	−29	4.04	....
1895	36.9	72	− 6	2.87	....
1896	35.3	67	2	1.68	....
1897	37.3	72	− 4	4.00	....
1898	33.4	69	−12	2.66	....
1899	33.3	77	−17	2.81	3.9
1900	34.6	66	3	2.26	1.0
1901	32.3	75	− 9	5.84	3.8
1902	33.9	70	− 2	5.33	9.4
1903	26.5	59	−11	2.00	7.8
1904	32.8	71	−20	3.12	9.8
1905	35.6	70	3	3.11	3.4
1906	35.9	70	− 1	4.73	6.2
1907	35.5	70	− 2	3.36	5.2
1908	36.4	73	5	3.03	6.0
1909	28.8	78	−10	2.55	10.9
1910	28.4	72	− 8	2.72	14.6
1911	39.3	74	4	3.27	1.6
1912	35.8	76	− 6	2.88	7.1
1913	36.4	68	3	2.82	2.9
1914	30.3	70	−20	5.46	12.5
Entire period	34.5	80	−29	3.28	6.6

Climatological Data for December, 1914.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	26.6	−3.0	57	2†	−15	26	46	6.08	+2.34	1.10	19.8	20	8	2	21	w.	Solomon Clark
Burlington	Mineral	875	20	29.0	−3.8	58	2†	−13	27	37	2.58	−0.07	0.80	15.0	9	8	9	14	w.	J. W. Vandiver
Franklin*	Pendleton	641	8	29.3	.....	55	2	2	15†	30	3.10	.....	1.20	5.0	11	7	10	14	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	3.69	+1.03	0.70	4.3	9	.....	.....	.....	w.	S. W. Lightner
Lost City	Hardy	.....	8	29.2	.....	60	2	− 6	27	34	4.02	.....	1.25	18.0	11	8	5	18	n.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	29.2	−3.0	60	2	− 4	27	41	3.03	+0.43	.....	8.0	11	10	6	15	n.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	28.4	−5.2	64	2	−10	16†	32	3.44	+1.17	0.65	9.0	9	2	13	16	nw.	John C. Fisher
Romney	Hampshire	824	17	.....	.....	.....	.....	−10[m]	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	29.2	−5.1	58	2	−13	15	46	4.51	+2.06	1.60	8.5	14	9	7	15	.....	J. M. Mallow
Averages and	Extremes	.....	.....	28.6	−4.0	64	2	−15	26	46	3.91	+1.16	1.60	11.8	12	8	7	16	w.	
Northern Section.																				
Bens Run[f]	Pleasants	622	13	31.0	−2.3	66	1	− 2	16	33	4.49	+0.67	1.29	11.5	13	10	5	16	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	4.23	.....	1.00	.....	8	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	29.8	−3.3	64	4	−14	16	39	7.00	+4.09	1.20	15.0	17	5	1	25	.....	H. A. Darnall
Cairo	Ritchie	674	12	31.0	−3.3	70	1	−12	16	31	6.30	+2.81	1.80	7.0	15	4	3	24	.....	Van A. Zevely
Central Station	Doddridge	950	12	29.0[d]	−4.0	62[d]	1†	−17	16	42[d]	5.18	+2.12	0.92	14.5	18	3	7	21	w.	G. W. Sherwood
Cheat Bridge	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	5.86	.....	0.80	.....	23	.....	.....	.....	.....	Franz A. Degler
Cortland*	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	4.77	.....	.....	.....	.....	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	32.6	−1.5	67	1	−10	16	39	5.33	+2.15	1.35	7.9	17	3	2	26	w.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	5.39	.....	1.23	15.0	19	9	0	22	sw.	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	4.72	.....	1.52	.....	12	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	28.7	−3.8	59	2	−10	16	39	5.16	+1.74	0.82	11.3	20	4	6	21	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	28.8	−5.4	62	1	−12	16	43	6.88	+3.63	1.04	13.5	20	8	0	23	w.	F. P. Hall
Glenville	Gilmer	738	25	31.4	−3.7	62	1†	−13	16	37	5.57	+1.95	1.30	12.0	13	8	2	21	.....	Joe N. Craddock
Grafton	Taylor	1,000	22	30.8	−3.3	62	1	−15	16	37	6.68	+3.25	1.65	15.0	15	6	4	21	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	29.8	−3.3	64	1	−20	16	43	6.17	+2.82	1.15	14.5	15	6	3	22	w.	Allen Smith
Mannington	Marion	974	12	29.4	−3.3	61	1†	−19	16	45	6.07	+2.84	1.84	13.4	19	5	3	23	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	30.2	−4.0	61	1†	− 5	16	37	6.00	+2.89	1.55	10.8	14	5	5	21	w.	Prof. Edgar L. Andrews
Moundsville*	Marshall	642	12	28.7[a]	−5.4	68	2	− 4[a]	16	41[a]	.....	.....	.....	.....	.....	12[a]	0[a]	18[a]	.....	M. Z. White
New Cumberland	Hancock	987	15	28.2	−3.1	64	2	− 5	15†	37	4.80	+2.35	0.90	11.0	11	8	1	22	n.	Frank S. Evans
New Martinsville	Wetzel	634	21	32.2	−2.8	65	2	− 6	16	35	7.76	+4.41	2.25	5.8	14	7	7	17	sw.	Wm. Ankrom
Osceola	Randolph	3,600	0	.....	.....	.....	.....	.....	.....	.....	5.75	.....	1.20	.....	17	6	3	22	.....	A. T. Dohmer
Parkersburg	Wood	638	26	30.6	−4.7	64	1	− 5	16	32	4.75	+1.98	1.41	7.1	18	4	3	24	sw.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	27.8	−3.8	61	2	−14	16	42	7.11	+3.34	.....	12.0	15	5	6	20	.....	J. W. Swisher
Philippi	Barbour	1,149	22	28.6	−4.8	58	2	−20	16	42	8.04	+4.35	1.28	22.7	21	8	4	19	nw.	J. D. Dadisman
Pickens	Randolph	2,697	24	29.4	−3.1	59	2	−11	15	45	7.91	+2.97	2.43	30.0	18	10	3	18	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	7.12	+3.45	1.28	14.6	19	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	4.70	.....	1.50	8.0	15	.....	.....	.....	e.	J. O. Goodman
Smithfield	Wetzel	835	10	26.2	.....	62	1	−14	16	42	5.52	+1.71	1.83	13.8	16	8	4	19	w.	G. M. Whisler
Terra Alta*	Preston	2,612	14	29.2	.....	62	2	− 8	15†	46	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. C. Shaffer
Wellsburg	Brooke	1,225	20	28.0	−2.9	62	2	− 4	15	28	5.37	+2.29	1.10	11.0	16	7	6	18	w.	C. P. Waugh
Weston	Lewis	1,026	26	32.0	−3.3	66	1	−15	16	40[b]	5.01	+1.32	1.00	14.0	16	4	4	22	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	30.2	.....	62	1	− 2	15†	39	7.54	+4.75	4.00	4.5	19	6	3	22	s.	Miss M. B. Forsyth
Averages and	Extremes	.....	.....	29.8	−3.6	70	1	−20	16	45	5.94	+2.78	4.00	12.6	16	7	3	21	w.	
Southern Section.																				
Bancroft	Putnam	574	11	31.5	−4.5	62	2	− 6	16	42	5.65	+2.67	1.05	6.0	18	6	0	25	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	33.0	−0.7	68	1	−10	15	34	5.57	+2.62	1.50	24.0	10	7	1	23	w.	John A. Ewart
Bluefield*	Mercer	2,558	20	31.8[i]	−3.4	59[i]	1	− 2[i]	16	44	2.73	−0.28	1.20	20.0	....	9[c]	4[c]	13[c]	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	35.6	−5.2	66	1	0	15†	29	6.87	+3.76	1.18	10.0	22	7	1	23	w.	R. C. Hewes
Clay	.....	706	0	32.4[a]	.....	62[a]	2	− 4	16	34[a]	5.86	.....	1.75	12.4	16	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba*	Jackson	650	14	30.8	−3.3	67	1	−12	15	42	4.30	+1.14	1.03	7.0	13	5	9	17	nw.	C. T. Perry
Dunlow	Wayne	717	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	33.4	−4.1	62	1	1	16	27	5.91	+2.94	1.40	21.2	15	2	7	22	nw.	J. J. Lincoln
Evans	Jackson	606	0	.....	.....	.....	.....	.....	.....	.....	4.99	.....	1.27	4.8	15	6	4	21	.....	B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	31.0	−3.1	60	1	−11	27	41	5.32	+2.94	0.95	19.5	19	13	0	18	n.	Arthur George
Hinton	do	1,450	25	31.2	−4.8	58	1†	− 3	16†	39	5.26	+2.55	1.30	16.0	19	9	1	21	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	29.8	.....	60	1†	− 5	15†	47	5.21	.....	.....	12.0	15	9	1	21	.....	R. E. Ferguson
Huntington	Cabell	538	19	32.1	−2.4	65	1	− 2	16†	35	5.14	+1.93	1.04	9.0	14	7	1	23	.....	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	29.1	−3.7	59	1†	−12	16†	37	5.30	+2.47	0.90	17.5	16	5	4	22	nw.	Geo. T. Argabrite
Logan	Logan	687	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. J. E. McDonald
Madison	Boone	704	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. J. McCarty
Nuttallburg[d]	Fayette	2,252	22	28.2	−5.5	60	1	2	16†	27	4.17	+1.36	0.90	24.0	9	9[d]	4[d]	14[d]	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	31.8	−3.6	65	1	− 7	16	44	4.82	+1.76	1.14	5.0	16	12	1	18	ne.	W. D. Holmes
Powellton[b]	Fayette	933	17	36.4	.....	65	2	− 2	15	38	3.35	+0.43	1.00	5.5	....	9	0	20	.....	Morris Hansford
Robertsburg	Putnam	574	14	30.1	−4.7	64	1	−10	16†	42	5.65	+2.28	1.05	7.8	17	6	5	20	.....	E. C. Brace
Ryan	Roane	700	11	31.4	−2.9	63	1†	−15	16	38	5.49	+2.20	1.02	11.9	19	6	4	21	.....	Wm. E. Ryan
Spencer*	do	784	16	31.3	.....	67	1	−14	16	40	6.51	+3.46	1.44	13.3	17	2	10	19	.....	A. M. McKown
Sutton	Braxton	839	11	.....	.....	69[c]	1	.....	.....	.....	5.20	+1.47	1.60	12.0	11	6	7	18	.....	Ben Gillespie
Union	Monroe	2,250	10	29.4	−3.1	60	1	−10	27	53	4.12	−1.64	1.22	12.0	11	.....	.....	.....	.....	Shelton Clark
Williamson	Mingo	660	13	30.8	−6.9	62	2	1	15†	29	5.64	+1.95	0.98	7.0	21	6	0	25	w.	J. F. Keyser
Averages and	Extremes	.....	.....	31.6	−3.6	69	1	−15	16	53	5.30	+2.26	1.75	12.5	16	7	3	21	w.	
State Averages and	Extremes	.....	.....	30.3	−3.8	70	1	−20	16	53	5.46	+2.38	4.00	12.5	16	7	4	20	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for December, 1914.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac	.58	.18	.05	.10	.75	.14	.33	.18	T.	.21	.05	.05	.28	.50	T.				.44	.08	1.10		T.	.25	.03		T.		.53	.25		6.08
Burlington	do.	.30	T.			.15	.21	.10	T.	.15	.25			.80						T.	T.				.40					.22			2.58
Franklin	do.	.80	.10	T.	.20	1.20	T.	.10		T.	.10	T.	.10		T.				T.		.10			.10	.10				.20				3.10
Harpers Ferry	do.	T.	.18			T.		.40	.70	.52	.21	.10			.68							.64				.26				T.			3.69
Lost City	do.	.60				1.25		.10	*	.10	.20				.60					.50	*				.30					.37			4.02
Martinsburg	do.	.05		T.	*	*	1.15		*	.20				.55						.08		.25			.25					.50			3.03
Moorefield	do.	.25	.59	.15	T.	.65	.53	T.	T.	T.	.20		.30							T.				T.	.40	T.				.37			3.44
Romney	do.													.60						*		.70			.30					.55			
Upper Tract	do.	.35	.18	.02	T.	1.60	.35	.50	.04	.02	.05			.60	.10					.15		T.			.20	T.	T.			.35			4.51
Northern Section.																																	
Bens Run	Ohio		.16	.19	1.29	.51		.26	.30		.13	.03		.50						.58		.01			.21					.32			4.49
Brandonville	Monongahela	.40		.18		.30			.45				.30							1.00			.96							.64			4.23
Buckhannon	do.	.60	.10		.40	.50		.45	.40	.20	.35	.10	T.	.60	.02					.58		1.20			.30	.10				.60	.50	T.	7.00
Cairo	Little Kanawha	.10	.12		.60	1.05	.10	.03	.47	.03	.32			.40							.20	1.80			.30					.18	.60		6.30
Central Station	Middle Is. Creek	.23	.14	.02	.52	.92	T.	.14	.33	.04	.23	.06	T.	.63	.15					.38	.04	.74		T.	.22					.29	.05	T.	5.18
Cheat Bridge	Monongahela	.17	.18	.22	.10	.80	.10	.05	.48	.10	.36	.16	.04	.31	.10					.50	.42	.40			.32	.50	.10			.10	.29	.06	5.86
Cortland	do.																																
Creston	Little Kanawha	.12	.05		.32	1.35	.02		.35	.05	.33	T.	T.		.50	T.				.05	.50	.90	.06		.10	.15				.18	.30		5.33
Davis	Monongahela	.24	.20	.12	.07	*	*	*	.20	T.	.10	.05	.20	T.	.35	.10				T.	.85	.75	.43	T.	.10	.40	T.			T.	1.23		5.39
Elizabeth	Little Kanawha	.07			.37	1.52			.41		.26	.01	.04		.46						.38	.67				.16				.37			4.72
Elkins ***	Monongahela	.34	.28	.17	T.	.34	.01	.60	.23	.14	.32	.07	.02	.17	.05	T.				.77	.18	.50		T.	.30	.07				.51	.09	T.	5.16
Fairmont	do.	.53	.35	.09	.11	1.02	.76	.13	.54	T.	.30	.08	.11		.88	.03				T.	.40	1.01	.03	T.	.01	.12	T.			.05	.33	T.	6.88
Glenville	Little Kanawha	.45	.20		.30	1.30		T.	.20	T.	.20	T.	T.		.70	.03				.55	.10	.84			.30	T.				.40	T.		5.57
Grafton	Monongahela	.75	.10		.15	1.65	.25	.37		.07	.30	T.		*	.90					.50		.65			.22					.56	.21		6.68
Lost Creek	do.	.68	.19	T.	.40	1.15		.25	.36	.10	.18	.12	T.	.70	.05					.48	T.	.75		T.	.28	T.				.48	T.		6.17
Manningtón	do.	.62	.08		.55	1.84	.04	.38	.34	.05	.19	.05	.01	.60	.18					.35	.03	.21			.15					.31	.09		6.07
Morgantown [a]	do	.60	.60		.20	1.55	.05	* .39	.37	.17	.18		.15	.70						.29		.61			.14								6.00
Moundsville	Ohio																																
New Cumberland	do	.60			.40	.90	.30	.30	.60	T.	T.	T.		.35	.25					.30		.50		T.	T.					.30	T.	T.	4.80
New Martinsville	do.	.30	.28		1.07	2.25		.45	.40	.04	.09	T.		.40						.55		1.05		T.	.18		.21			.49			7.76
Osceola	Monongahela	.30	.20	.30	.20	.50	.40		.20		.10	.10			.30	.20					.40	.30	.40		.30	.35					1.20		5.75
Parkersburg ***	Ohio	.18	.01	.23	1.29	.15	.10	.25	.11	.02	.02	.03		.38	.02					.49	.28	.57		T.	.24					.38	T.	T.	4.75
Parsons	Monongahela	.30	.34	.05		1.20	.35	.30		.30	.27	.20		.30						*	*	2.25			.50					.75			7.11
Philippi	do.	1.26	.08	.03	.18	1.28	.10	.32	.28	.07	.35	.12	.14	.70	.30					.73	.04	.80			.56	.03				.60	.07	T.	8.04
Pickens	do.	.13	.20	.17	.30	.23		T.	.50	.09	.20	.40	.20	.30	.60					2.43	.10	T.			.40	.20				1.11	.35		7.91
Rowlesburg	do.	.14	.60	.10	.02	.44	.70	.06	.42	.02	.16	.30	.08		.74	.02					.80	.94	.34		T.	.32					.92		7.12
Saint Marys	Ohio		.12		.25	1.50		.30	.10	T.	.03				.40					.03	.44	.90	.10	T.	.03	.20				.20	.10		4.70
Smithfield	Fishing Creek	.61	.07	.05	.28	1.83	.26	.28	.40	.22	.25	.05	T.	T.	.45	.15	T.					.22			.15	.25	T.						5.52
Terra Alta	Monongahela																																
Wellsburg	Ohio	.16	.20		1.00	1.10	.29	.32	.43	.02	.05	T.		.20	.40					.10		.64		T.	.10					.20	.16	T.	5.37
Weston	Monongahela	.86	.16	.08	.07	.10		T.	.66	.14	.18	.10		T.	1.00	.04				T.	.62				.12	.14				.20	.54		5.01
Wheeling	Ohio	.10	.38	.01	.12	4.00	.30	.11	.56	.07	.04	T.		.03	.27	T.				.03	.40	.68	.01		T.	.09				.01	.33	T.	7.54
Southern Section.																																	
Bancroft	Great Kanawha	.08	.10	.02	.80	1.05	.20		.10	.11	.14	.05	T.		.40					.10	.48	.83			.07	.10				.75	.27		5.65
Beckley	do.	.41			.88					.38	.20			.30			.40	.30		1.50	T.				.40	.80							5.57
Bluefield	do	.25	.43		*	*	*			*	.05	.05		.50	.20						*	*			.05	1.20							2.73
Charleston	do.	.57	.27	.02	.52	1.18	.08		.12	.20	.18	.06	.04		.72	.02				.20	.70	.78	.10		.10	.27	.06			.28	.40		6.87
Clay	do.	.50	.10	T.	.26	1.20	.05		.30	.10	.20	T.	T.	.15	.55	T.				.20	1.75	*	*		.40						.10		5.86
Cuba	Sand Creek	.06	.15	.10	1.03	.05	.12		.36	.11	T.	.30								.85		.77			.30					.10	T.		4.30
Dunlow	Big Sandy																																
Elkhorn	do.	.42	T.	.05	.72	.09		.03	.09		.10	.10		.45						.83	.21	.34			.51	1.40				.57			5.91
Evans			.02	.38	1.27	.09	.15		.21	.07	.07	.02		.40	T.					.65		.87			.22					.42	.15		4.99
Green Sulphur Spgs.	Great Kanawha	.22	.16	.05	.15	.80	.40	.30	.02	.12	.20	.10	.10	.55	.15					.65	.15	.25			.45	.50							5.32
Hinton	do.	.08	.34	.14	.16	1.30	.06	.04		.02	.20	.02	T.	T.	.60					T.	.64	.06	.08		.06	.62	.50			.14	.20		5.26
Holcomb	do.	*	*	*	1.20						*	*	*	.81						*	*	2.00			*	.70				*	.50		5.21
Huntington	Ohio	T.			1.04	.42	.44		.04			.14	.04		.52					.34	.40	.84			.02	.30				.56	.04		5.14
Lewisburg	Great Kanawha	T.	.48	.02	.16	.90	.06	.03	.01	.20	.20	T.		.65						.76	.22	.21			.40	.50				.50			5.30
Logan	Guyandotte																																
Madison	Great Kanawha										.20	.10	.10	T.	.50					.15	.90	.50			.10	.45		.20	.20	T.			†3.40
Marlinton	do.																																
Nuttallburg	do.	T.	.22	.10	.45		T.	T.	T.	T.	.40	.60		.50	T.	T.				.60		.40				.90				T.	T.		4.17
Point Pleasant	Ohio	.04	.02		.80	1.14	.22		.12	.08	.24	.02	.04		.38	T.				.10	.50	.80			.08	T.				.24	T.		4.82
Powellton	Great Kanawha	.29	.10		.80	.45			*	.16	*	*		*		.40										.15				1.00			3.35
Princeton	do.																																
Robertsburg	do.	.05	.15		.68	1.05	.25		.06		.14	.02	T.		.45					.20	.60	.90	.05		.20	.10				.60	.15		5.65
Ryan	do.	.16	.25	.09	1.02	.03	.05		.35	.14	.19	.04		.71	.03					.59	.05	.91			.31	.01				.46	.10		5.49
Spencer	Little Kanawha	.20	.15	T.	.46	1.30	.19	T.	.25	.10	.10	.10	.08	T.	.75					.42	.27	T.	1.44			.30				.20	.20		6.51
Sutton	Great Kanawha	.40	T.	T.	.15	1.10	T.		.45	T.	.20		.10	.10	.60					T.		1.60	T.		.20					.30	T.		5.20
Union	do.		.12	.10	T.	1.22	T.	.05	.15	T.	.10				.30						1.00	.28				*	.80						4.12
Williamson	Big Sandy	.10	.16	.02	.54	.70	.28		.04	.04	.18	.04	.04	.10	.30					.08	.84	.20	.04		T.	.98	.36			.40	.20		5.64

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

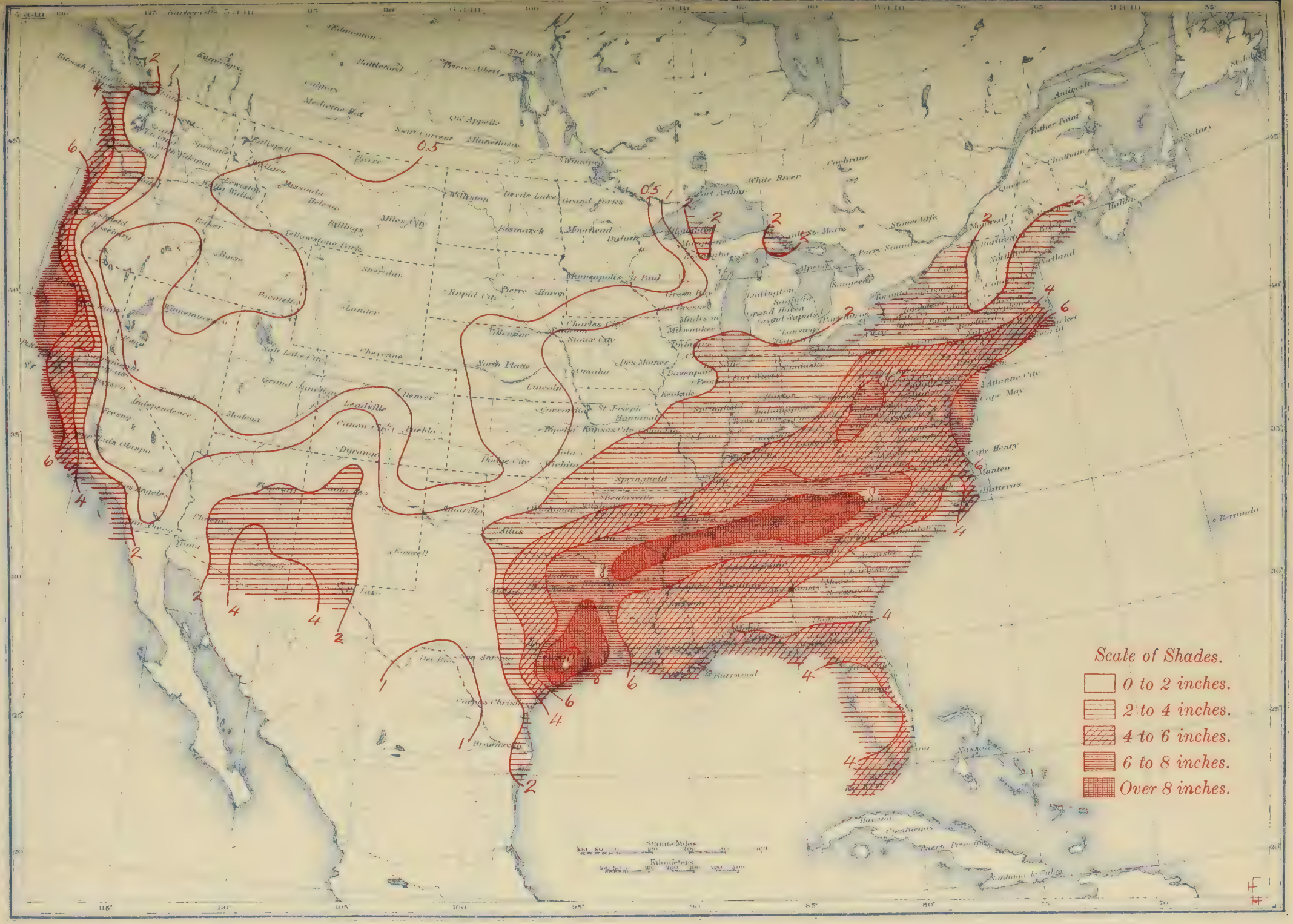
Precipitation measured in the morning; amount the unrecorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch. † Amount incomplete. [a] The entry on the 7th (.39) was estimated.

Daily Temperatures for December, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	55	57	57	50	55	30	34	33	35	38	38	28	27	30	8	17	20	37	43	38	46	31	22	32	32	18	29	42	48	48	27	35.6
	Minimum	44	40	47	35	29	25	27	29	32	27	26	19	9	8	-5	-7	-5	-9	14	19	25	16	15	21	17	-15	-10	5	18	26	20	17.5
Burlington	Maximum	54	58	58	52	47	38	37	40	38	37	40	35	33	38	18	25	29	31	40	41	47	34	33	31	39	23	23	33	35	43	35	37.6
	Minimum	46	49	48	40	38	29	32	32	33	32	31	22	20	10	3	-9	-6	-6	13	26	29	23	22	15	18	-10	-13	1	15	30	20	20.4
Lost City	Maximum	48	60	58	50	44	40	35	37	36	37	35	32	33	36	22	22	23	28	38	39	44	38	30	32	33	21	28	36	40	44	32	36.5
	Minimum	36	40	39	40	34	28	32	33	32	33	30	23	28	22	-4	-4	-1	3	24	23	30	24	18	22	21	0	-6	12	26	32	15	21.9
Martinsburg§	Maximum	59	60	45	42	35	36	40	38	36	35	38	35	37	33	17	22	27	27	41	33	45	34	33	35	28	17	21	32	45	41	34	35.5
	Minimum	47	45	41	38	30	31	33	34	33	33	34	31	25	29	5	5	5	-1	0	26	27	25	25	20	25	4	4	-3	9	26	28	22.8
Moorefield	Maximum	63	64	58	52	48	42	36	34	32	36	34	36	32	30	18	14	22	26	36	26	35	32	26	26	30	22	22	26	34	46	34	34.6
	Minimum	52	56	44	46	42	32	28	30	26	30	28	28	30	14	0	-10	-4	0	24	20	26	24	20	18	20	-4	-10	10	26	34	10	22.3
Upper Tract	Maximum	53	58	57	55	40	34	34	36	35	35	34	33	33	35	18	30	30	35	38	40	48	39	32	31	38	21	36	40	44	48	34	37.9
	Minimum	45	41	48	38	31	27	26	30	32	30	27	20	19	14	-13	-8	2	1	16	26	30	26	26	17	20	-9	-10	8	22	31	25	20.5
Northern Section.																																	
Bens Run	Maximum	66	65	54	50	44	45	45	41	45	41	34	33	32	32	10	20	24	33	38	34	41	30	29	35	33	27	37	34	51	50	30	38.2
	Minimum	48	52	45	40	38	38	38	33	36	32	29	19	22	9	-1	-2	0	2	29	22	30	20	20	19	21	4	5	17	18	29	23	23.7
Buckhannon	Maximum	60	63	58	64	47	42	42	36	45	35	34	30	33	30	10	19	23	36	44	39	50	32	28	35	34	19	34	40	56	44	32	38.5
	Minimum	50	45	48	40	37	33	32	31	32	28	27	19	17	8	-5	14	-1	-3	24	23	30	20	18	17	16	-5	-4	10	36	29	16	21.1
Central Station	Maximum	62	62	57	51	..	..	..	..	43	40	33	33	33	32	12	20	24	35	39	36	43	35	28	34	35	21	35	39	51	50	30	37.4
	Minimum	52	52	45	42	37	35	36	33	35	30	28	14	18	9	10	17	9	-7	22	20	30	19	21	14	19	-10	5	9	26	29	22	20.6
Creston	Maximum	67	64	61	53	48	46	46	43	45	42	35	34	33	34	21	29	29	33	39	45	44	35	31	45	35	34	36	44	51	53	33	41.5
	Minimum	53	53	45	47	40	39	39	31	33	32	30	18	21	12	-5	-10	-3	1	25	24	32	22	23	17	24	-3	0	12	29	32	23	23.7
Elkins	Maximum	59	59	56	51	39	36	38	37	43	35	29	28	34	29	13	24	25	37	46	39	50	26	26	34	30	20	32	39	54	45	28	36.8
	Minimum	52	47	49	39	36	33	32	32	34	27	25	17	18	2	-4	10	5	-2	29	26	25	20	18	18	13	-8	-4	6	24	25	15	20.6
Fairmont§	Maximum	62	60	54	48	39	38	39	38	44	33	32	32	34	22	12	20	25	37	40	44	44	28	28	34	24	28	34	41	51	36	29	36.5
	Minimum	50	52	50	45	36	33	34	31	31	32	29	19	20	22	-3	-12	-10	5	-3	21	21	20	20	17	22	-1	-1	15	16	32	25	21.2
Glenville	Maximum	62	62	61	54	51	45	43	43	45	44	34	32	33	33	17	22	21	33	41	42	37	38	30	36	36	25	36	39	53	54	33	39.8
	Minimum	45	50	47	40	32	37	36	36	35	31	31	20	21	13	-5	13	-5	3	25	27	31	22	22	19	21	-2	-1	11	29	32	26	23.1
Grafton	Maximum	62	60	57	54	45	40	39	40	45	43	34	31	34	34	15	20	26	34	50	39	35	35	27	35	35	25	34	41	54	52	32	38.9
	Minimum	49	42	50	45	37	36	32	36	31	32	30	22	21	14	3	15	-2	3	24	22	32	21	23	12	20	-4	0	12	28	32	25	22.6
Lost Creek	Maximum	64	63	58	53	43	42	41	38	45	43	32	34	33	33	11	23	26	33	41	36	49	34	30	34	34	20	34	42	53	52	31	38.9
	Minimum	52	49	49	42	38	34	37	32	36	29	29	19	18	9	-2	20	-7	10	22	12	30	20	22	15	18	-11	-6	9	26	31	24	20.8
Mannington	Maximum	61	61	57	52	42	38	38	38	42	41	33	31	33	33	12	20	24	35	40	35	46	33	29	34	34	22	34	41	52	52	31	37.9
	Minimum	51	51	49	41	36	34	36	32	34	31	29	19	19	11	8	19	13	-10	24	17	29	19	22	16	19	-8	2	10	25	31	24	20.9
Morgantown	Maximum	61	61	56	50	41	38	37	36	41	39	32	30	34	32	8	17	22	38	41	34	46	32	26	33	33	19	32	39	52	52	30	36.8
	Minimum	53	54	49	39	35	33	34	30	34	30	28	21	20	7	4	5	4	1	30	21	29	19	21	20	17	0	9	21	28	29	21	23.5
New Cumberland	Maximum	59	64	54	46	39	36	37	37	37	38	35	31	30	30	10	18	22	32	35	34	41	25	25	31	31	20	34	38	46	45	28	35.1
	Minimum	50	54	45	38	32	30	33	30	31	33	28	20	17	6	-5	2	-5	-5	28	22	25	15	17	15	12	4	8	15	24	28	20	21.4
New Martinsville	Maximum	62	65	60	59	46	44	42	42	44	45	40	41	40	35	14	23	24	33	39	37	43	35	30	35	36	28	38	42	50	52	33	40.5
	Minimum	53	54	46	40	38	37	37	33	36	33	31	20	22	10	-3	6	-4	1	27	21	30	20	24	20	22	2	3	12	27	30	24	23.8
Parkersburg	Maximum	64	60	55	51	44	44	43	40	44	37	32	30	33	32	12	19	21	33	39	33	42	28	28	34	33	21	37	39	54	43	27	37.2
	Minimum	57	48	46	42	40	39	39	34	35	32	26	21	24	4	-1	5	-1	5	32	23	26	20	22	22	14	3	5	20	31	27	16	24.1
Parsons	Maximum	59	61	57	45	41	37	38	35	40	36	30	29	33	28	10	22	24	36	43	43	46	34	27	32	32	22	31	37	49	51	32	36.8
	Minimum	29	44	45	40	34	31	32	32	34	29	26	19	19	9	4	14	4	6	19	25	33	21	15	9	21	-11	-8	5	19	22	10	18.8
Philippi	Maximum	57	58	57	54	44	42	38	37	45	43	32	38	32	31	7	15	24	33	38	34	36	33	25	35	34	18	36	33	51	48	28	36.6
	Minimum	48	46	50	42	38	34	37	32	36	30	29	18	18	7	-9	20	8	9	23	22	32	21	21	16	18	-11	-5	11	25	21	24	20.5
Pickens	Maximum	57	59	57	50	45	44	42	34	39	34	26	37	34	27	8	25	30	51	42	43	48	27	30	33	31	31	28	53	47	46	24	38.1
	Minimum	52	49	47	43	38	35	32	30	33	24	22	15	19	8	11	7	1	6	24	24	26	15	16	19	14	-8	-1	13	27	23	14	20.7
Terra Alta	Maximum	60	62	56	54	50	42	46	45	52	51	34	30	30	31	23	28	30	50	44	..	..	..	..	..	..	32	..	..	..	..	..	42.5
	Minimum	40	40	34	30	20	18	22	22	24	22	22	18	15	0	-8	6	-2	4	13	..	..	..	..	..	..	8	..	..	..	..	..	16.0
Wellsburg	Maximum	57	62	56	44	37	34	35	36	39	37	31	27	31	29	7	15	17	31	36	33	40	27	24	30	30	18	30	38	46	46	27	33.9
	Minimum	53	54	43	37	33	31	32	30	32	31	27	19	19	5	4	0	4	5	25	21	25	15	18	19	16	4	7	20	18	27	20	22.1
Weston§	Maximum	66	64	56	64	60	58	44	40	44	42	38	34	32	30	14	20	18	40	42	50	44	..	30	34	24	30	34	38	54	38	28	40.3
	Minimum	54	50	52	48	50	48	40	32	34	36	28	26	18	20	-2	15	2	0	12	20	24	20	..	18	22	4	0	6	18	34	26	23.8
Wheeling§	Maximum	62	61	55	47	39	38	39	37	42	40	34	32	34	24	17	24	26	34	41	43	43	31	29	35	27	29	38	41	50	36	27	37.3
	Minimum	51	54	51	44	37	33	34	32	32	34	31	20	20	22	-2	2	-2	2	2	24	23	18	19	20	21	5	5	13	21	31	25	23.0
Southern Section.																																	
Beckley	Maximum	68	60	61	58	45	50	57	64	55	37	34	36	36	33	24	25	28	40	48	48	52	42	50	42	36	24	24	38	53	42	32	43.3
	Minimum	47	43	48	45	35	35	38	38	36	27	19	18	22	-1	10	9	1	15	31	31	31	23	20	24	22	4	-1	6	30	26	12	22.7
Bluefield	Maximum	59	57	55	..	..	..	55	45	..	45	28	32	..	31	18	32	32	36	41	..	..	50	36	36	..	25	..	44	52	46	32	40.3
	Minimum	55	52	46	..	..	..	32	37	..	27	24	20	..	11	0	-2	6	12	31	..	..	21	21	26	..	9	..	0	28	29	26	23.2
Charleston	Maximum	66	65	60	56	52	50	53	50	50	44	33	35	34	35	24	25	30	38	39	41	52	36	35	36	36	29	36	46	58	55	85	43.0
	Minimum	54	55	54	51	43	40	40	40	40	33	31	25	25	15	0	0	5	9	32	30	36	24	22	24	24	4	7	17	32	34	25	28.1
Elkhorn	Maximum	62	59	58	56	47	41	49	41	44	43	30	33	33	31	16	28	31	38	40	40	40	38	34	37	33	24	33	37	50	47	31	39.5
	Minimum	55	52	49	42	40	37	37	39	39	30	27	22	27	12	3	1	8	17	36	32	38	24	23	24	18	10	6	14	29	30	25	27.3
Green Sulphur Spgs.	Maximum	60	59	57	55	48	44	48	46	45	41	32	33	33	34	19	28	33	36	35	41	42	38	36	32	34	30	24	36	43	43	36	39.4
	Minimum	50	51	46	47	42	36	36	37	35	29	26	19	23	10	-3	10	-3	0	29	30	33	20	16	21	26	6	-11	-5	21	30	25	22.6
Hinton§	Maximum	58	58	56	54	44	41	44	48	47	35	34	34	34	30	20	28	30	33	35	40	44	34	38	34	32	26	25	33	44	37	36	38.3
	Minimum	43	52	50	51	40	37	36	37	36	31	27	24	25	27	0	3	-1	5	7	30	32	24	20	20	26	10	-3	-2	5	31	28	24.0
Holcomb§	Maximum	60	58	60	52	51	48	45	40	44	32	29	34	34	23	18	18	32	46	39	48	47	30	32	34	26	32	30	50	42	50	29	39.1
	Minimum	52	50	46	47	41	37	34	32	32	28	27	16	11	16	5	5	-5	5	5	30	36	19	11	14	12	-4	-3	3	10	16	24	20.4
Huntington§	Maximum	65	60	55	52	47	49	49	42	49	35	34	34	35	18	14	24	24	37	39	44	41	30	33	36	25	22	36	40	53	36	28	38.3
	Minimum	53	52	51	49	44	41	39	39	40	34	31	26	27	18	1	2	-2	4	12	23	25	22	22	26	24	6	5	18	18	35	21	25.9
Lewisburg	Maximum	59	59	56	55	42	39	45	44	42	40	30	31	31	28	18	23	27	34	32	38	40	35	33	30	34	29	19	28	42	37	31	36.5
	Minimum	45	51	46	42	37	34	35	36	36	29	25	19	21	12	-5	-12	3	-3	28	29	31	20	19	22	28	7	-12	7	23	30	24	21.7
Madison	Maximum	..	..	..	..	..	..	..	..	48	33	33	34	35	20	18	26	29	40	41	50	53	31	29	29	25	42	42	55	37	..	..	35.7
	Minimum	..	..	..	..	..	..	..	..	..	32	30	23	25	19	-2	4	3	4	6	32	32	24	21	24	11	5	12	14	35	24	..	17.0
Marlinton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Point Pleasant	Maximum	65	63	59	53	46	49	50	45	48	41	35	32	34	34	15	23	24	32	38	37	41	33	32	37	38	46	42	41	54	50	32	40.9
	Minimum	51	53	44	44	39	37	37	34	35	30	28	19	21	9	4	7	3	2	28	20	30	19	20	19	20	2	0	4	28	29	17	22.7
Powellton	Maximum	64	65	62	58	53	50	51	50	46	50	38	36	40	38	19	28	31	40	43	45	53	40	36	..	34	..	38	51	56	58	37	45.2
	Minimum	54	54	52	48	41	41	40	40	31	30	22	25	13	-2	-1	6	8	30	32	35	25	23	..	8	..	0	14	30	34	27	27.6
Robertsburg§	Maximum	64	62	54	50	45	48	49	40	48	35	35	34	39	20	15	22	30	35	38	45	40	30	33	35	25	27	37	42	55	35	32	38.7
	Minimum	49	50	44	48	41	38	38	37	38	31	30	22	24	18	9	-10	-10	5	2	22	22	20	20	21	23	6	5	12	13	34	20	21.5
Ryan	Maximum	63	63	58	54	50	50	50	48	45	37	32	33	35	32	15	20	26	36	38	37	45	35	30	34	26	24	35	40	55	45	32	39.5
	Minimum	52	51	50	48	45	37	45	39	37	31	29	16	21	15	11	-15	-8	2	30	21	32	21	17	17	21	8	3	9	35	28	23	23.3
Spencer§	Maximum	67	64	55	54	48	47	41	43	46	34	34	35	36	21	18	25	29	39	40	45	43	38	32	35	25	25	35	43	55	36	30	39.3
	Minimum	54	58	46	50	40	39	35	38	38	31	28	18	21	17	-9	-14	8	1	27	22	27	21	20	18	24	9	4	9	28	35	24	23.3
Union§	Maximum	60	56	58	50	49	56	48	41	42	33	34	32	31	21	16	26	24	34	36	39	36	38	42	46	35	20	24	48	44	36	32	38.3
	Minimum	40	52	48	48	38	37	40	33	36	30	21	20	19	18	0	-9	-7	1	8	18	20	25	20	24	20	6	-10	-5	0	33	21	20.4
Williamson§	Maximum	60	62	57	54	47	46	47	43	47	32	31	33	32	18	15	27	28	35	35	46	46	30	35	31	29	24	27	34	38	34	32	37.3
	Minimum	48	52	49	49	44	41	32	32	33	30	28	25	25	18	1	1	1	6	10	20	28	22	20	20	28	13	11	10	12	25	21	24.4

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
Statute Miles
Kilometers

US
NE

LIBRARY
OF THE
UNIVERSITY OF ILLINOIS
URBANA

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
Charles F. Marvin, Chief

ANNUAL SUMMARY, 1914

WEST VIRGINIA SECTION

OF THE

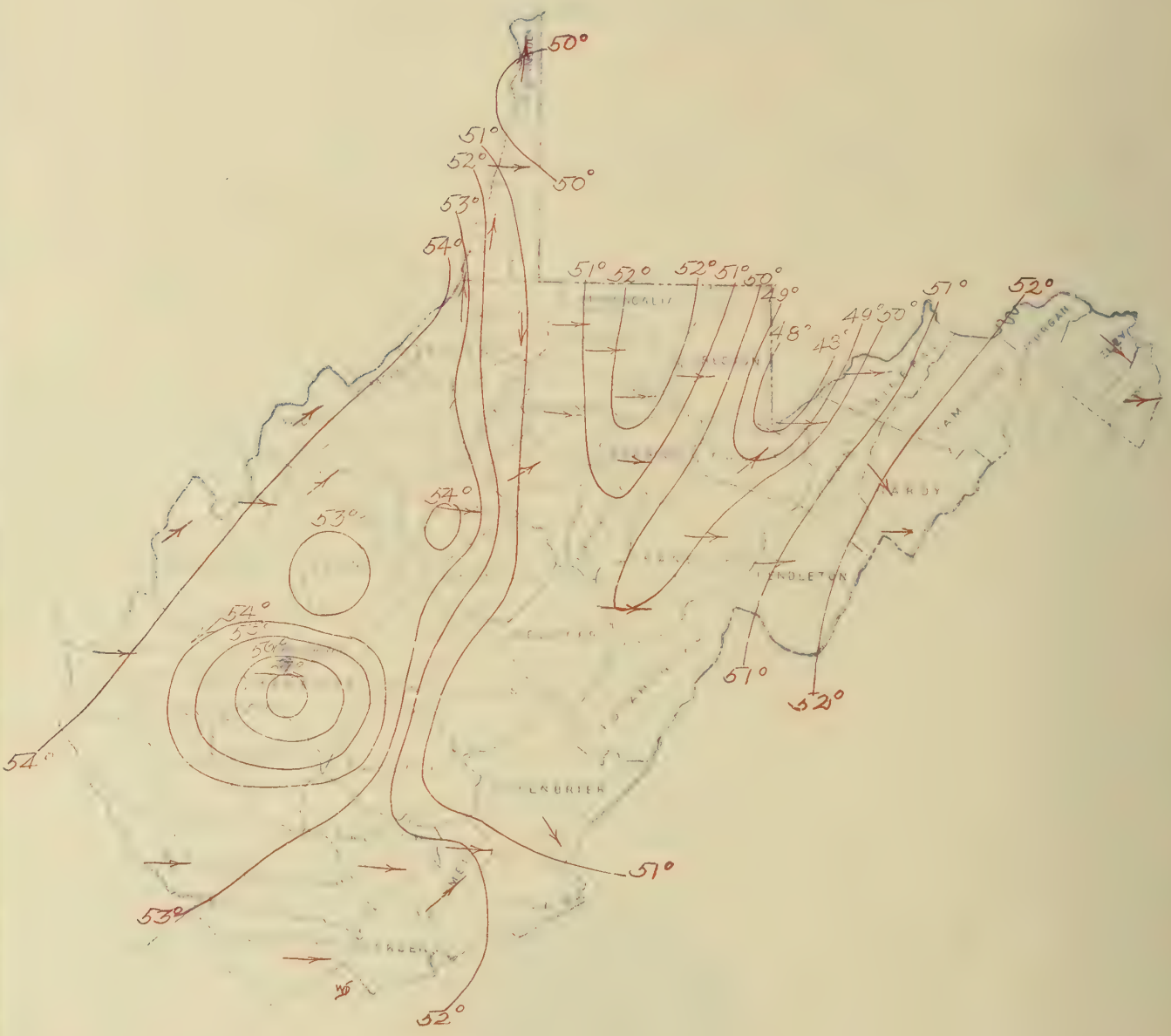
CLIMATOLOGICAL SERVICE

HENRY C. HOWE
SECTION DIRECTOR



PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MARCH 8, 1915

MEAN ANNUAL ISOTHERMS AND PREVAILING WINDS, 1914.



U. S. DEPARTMENT OF AGRICULTURE,

CLIMATOLOGICAL SERVICE

OF THE

WEATHER BUREAU.

CENTRAL OFFICE: WASHINGTON, D. C.

WEST VIRGINIA SECTION,

HENRY C. HOWE, Section Director.

ANNUAL SUMMARY No. XXI. 1914.

GENERAL SUMMARY.

The average temperature for the State was 52.2°, or 0.6° below the average for the past 24 years. Excepting January, the winter and early spring months were much colder than usual, while the late spring and summer months were somewhat warmer than the average, except July, when nearly normal temperature conditions prevailed. September was abnormally cool, but October was warm and unusually pleasant. In the more elevated sections killing frosts occurred until June 17 and on September 10, 21, and 22; but in most of the agricultural districts the season of growth extended from the second decade in May until the last decade in October.

The average precipitation was 39.71 inches. The yearly State average from 1891 to 1914, inclusive, is 41.97 inches. The winter months averaged wetter than usual, but the late spring, summer, and fall months were dry, except August and the last half of October, and droughty conditions prevailed, except for short periods, from the last of May until August 10, and again from the middle of September until the second decade in October. Owing to favorable conditions and light rainfall in January and March, there were no floods in the district.

The average cloudiness was somewhat below the normal. At Parkersburg the sunshine averaged 51 per cent. of the possible amount, and at Elkins, 47 per cent.

The wind movement at Parkersburg was 47,656 miles, and at Elkins, 34,939 miles.

THE WEATHER BY MONTHS.

January was abnormally warm and soomewhat drier than usual. During the past 24 years the January temperatures averaged higher only five times. The snowfall was considerably above the average. The precipitation was well distributed and the weather conditions were exceptionally favorable. Except in a few of the more elevated sections, nearly all the snowfall was received from the 1st to the 4th, the amounts for that period ranging generally from 4 inches to more than 2 feet. The amounts in the Ohio river sections were unimportant and they were generally light over the eastern panhandle section. The cold period of the month was from the 11th to the 14th. Abnormally high temperatures, exceeding the previous January records, were recorded on the 29th.

February was much colder and somewhat wetter than usual. The snowfall was the heaviest of record for February and the heaviest for any month during the past 20 years. There were three short periods with the temperatures near or below zero. In the northern and central sections the temperatures on the 25th ranged from about zero to 22° below zero, the lowest readings of record for any spring after February 15. The wet periods were 5–7th, 12–16th, 19–20th, and 23d–24th. Heavy snow fell on the 13–16th and 23d–24th. Navigation was impeded in the Ohio by running ice.

March was unseasonably cold and the precipitation was much deficient in most sections. Only one March since 1895 was drier, but the snowfall was the greatest of record for March. As the snowfall melted during short periods of warm, rainy weather, there was no flood in the district. The previous March temperature records were broken at several of the central mountain stations on the 21st, when readings from zero to 7° below zero were recorded. The readings were also low on the 1st, 2d, and 12th. Warm weather prevailed on the 15–17th and after the 25th.

April was slightly warmer and considerably wetter than usual, with a favorable precipitation distribution. In most sections freezing temperatures did not occur after the 20th, and the last week was favorable for growth. Abnormally cool weather prevailed from the 8th to the 11th. Most of the precipitation occurred on the 1st–3d, 12th, 15–16th, 19–20th, and 25–26th. Light snow or snow flurries occurred in many sections on the 3d, 5th, and 8th.

May was characterized by dry weather, an excess of sunshine, and a short period of abnormally high temperatures. Only one month of record from May to August, inclusive, was drier, and more sunshine was received than during any other May of record. Heavy to killing frosts occurred in the more elevated sections until near the close of the second decade, causing considerable damage. Droughty conditions prevailed during the last decade. The highest temperatures occurred generally on the 29th, and the lowest on the 1st and 15–17th. About three-fifths of the rainfall was received on the 4–6th.

The rainfall in June was light and favorably distributed, the sunshine abundant, and the temperature averaged the highest for any June for the past 15 years. Only one June of record was drier. The conditions were droughty until the beginning of the last decade, causing much damage to vegetation. High temperatures prevailed from the 9th to the 11th and 21st to the 28th. On the morning of the 17th a temperature of 30° was recorded at Bayard, Grant county, and much damage resulted to vegetation in that section. Moderate showers occurred on the 4–5th and 22d–27th.

July was characterized by two periods of high temperature, three abnormally cool spells, light and unfavorably distributed rainfall, and an excess of sunshine. The high and low temperature records for July were nearly equalled. The average temperature was normal. A severe drought prevailed until the 13th and the conditions were again droughty at the close of the month. Crops suffered from lack of moisture and the rivers and streams were unusually low. High temperatures prevailed from the 9th to the 17th, and the weather was abnormally cool on the 1st, 19–20th, and 28th–31st. Most of the rainfall was received on the 12–16th and 24–28th.

While the August temperatures averaged practically normal, unusually warm weather prevailed on several days. The rainfall was considerably above the average and favorably distributed. The severe drought continued until the 10th, when good showers occurred. The ground was well soaked by general rains during the last decade and late crops and pastures were in good condition at the close of the month. High temperatures prevailed on the 6–11th and 20th–21st, and the lowest readings were noted on the 1st, 12–17th, and 25th.

September was cool and exceptionally dry. In most sections practically all the rainfall was received on two or three days. The rains during the last of August kept the soil in good condition until near the middle of the month, but a severe drought again prevailed during the last decade, and the rivers and streams were exceptionally low. The highest temperatures occurred on the 1st–2d and 17th–23d, and cool weather prevailed from the 8th to the 16th, with killing frosts in the northern sections on the 10th. Killing frosts occurred in many sections on the 27th and 29th, but not much damage resulted, owing to the lateness of the season. Rain was general on the 2d, 7th, 11th, and 23d–24th.

October was not only considerably warmer than usual, but the temperature distribution was exceptionally favorable, the first killing frosts of the season in most of the agricultural districts not being received until well into the last decade. Pastures and fields were green until the close of the month and late crops were harvested in good condition. The rainfall was slightly above the normal and well distributed. Light snow or snow flurries occurred in many sections on the 25th. The temperatures were high on the 2d–17th and 19–25th.

November was characterized by exceptionally fair and dry weather, the amount of sunshine received exceeding the record for any previous summer or early fall month. The November precipitation was less in only two years of record. The rivers and streams continued exceptionally low, navigation was practically suspended, and drilling operations were delayed in many sections for lack of water. The conditions were favorable for grazing and outdoor work. Cool weather prevailed on the 9–10th and 17–24th. The highest temperatures were recorded on the 13–16th and 25–30th.

December was exceptionally cold, cloudy and wet. Both the precipitation and snowfall exceeded previous December records, except in 1901 and 1910, and the lowest temperature recorded, 20° below zero, was within 2° of the December record. The ground was well protected by snow during the two cold periods. The month opened warm, but cold weather prevailed from the 11th to the 29th, except on the 19th-21st, when the temperature conditions were nearly normal. Most of the snowfall was received on the 10-14th, 19th-21st, and 24-25th.

CHANGES IN ANNUAL SUMMARY FOR 1913.

For the following stations on page 6 the mean monthly values printed should have been used with the letters given below, which indicate the number of days missing in the records. Four days missing, d; five days missing, e, etc.:

Beckley—July, p. Bluefield—June, h; August, d; October, d; November, g; December, e. Cairo—March, j. Central Station—August, n; September, n. Lewisburg—May, e. Logan—January, j; May, h; August, l. Madison—February, k; May, l; June, g; August, l; October, f; November, f. Marlinton—May, h; September, e; October, f. Morgantown—October, g. Moundsville—February, e. New Martinsville—March, e; April, e. Nuttallburg—January, h; February, g; March, e; April, i; May, g; June, i; July, i; August, m; October, e; November i; December, g. Point Pleasant—March, d; April, g. Powellton—December, h. Sutton—January, l; October, e. Union—July, f. Wellsburg—July, i. Wheeling—January, e; March, f

Dates on which First and Last Killing Frost Occurred or Minimum Temperature Fell to 32 Degrees.

Station.	Last in Spring.	First in Autumn.	Station.	Last in Spring.	First in Autumn.
Bancroft	April 11	Oct. 27	Marlinton	June 17	.....
Bayard	June 17	Sept. 9	Martinsburg	April 11	Oct. 27
Beckley	May 15	Sept. 27	Moorefield	April 10	Sept. 10
Bens Run	April 11	Oct. 27	Morgantown	May 1	Sept. 29
Bluefield	April 21	Oct. 27	Moundsville	May 2	Oct. 27
Buckhannon	May 17	Sept. 27	New Cumberland	May 16	Oct. 28
Burlington	May 3	Sept. 29	New Martinsville	April 13	Oct. 27
Cairo	May 2	Sept. 29	Nuttallburg	May 2	Oct. 27
Central Station	May 16	.....	Parkersburg	April 10	Oct. 27
Charleston	April 10	Oct. 27	Parsons	May 17	Sept. 25
Creston	May 1	Oct. 27	Philippi	May 17	Sept. 29
Cuba	May 1	Oct. 27	Pickens	May 2	Sept. 10
Elkhorn	April 13	Oct. 28	Point Pleasant	May 1	Oct. 27
Elkins	May 17	Sept. 29	Powellton	April 13	Oct. 27
Fairmont	May 1	Oct. 27	Princeton	May 20	.....
Franklin	May 17	.....	Robertsburg	May 1	Oct. 27
Glenville	April 13	Oct. 27	Ryan	May 17	Sept. 10
Grafton	May 17	Oct. 27	Smithfield	May 16	Oct. 27
Green Sulphur Springs	May 17	Sept. 29	Spencer	May 16	Sept. 30
Hinton	April 11	Oct. 27	Sutton	April 14	Oct. 20
Holcomb	May 17	Sept. 27	Terra Alta	.....	Sept. 8
Huntington	April 11	Oct. 27	Union	May 15	Sept. 27
Lewisburg	May 15	Sept. 27	Upper Tract	May 17	Sept. 29
Logan	.....	Oct. 28	Wellsburg	May 1	Oct. 27
Lost City	May 1	Sept. 29	Weston	May 2	.....
Lost Creek	May 17	Sept. 10	Wheeling	April 21	Oct. 27
Madison	April 14	Oct. 27	Williamson	April 13	Oct. 27
Mannington	May 16	Sept. 29	.....	.....	.....

COMPARATIVE ANNUAL DATA FOR WEST VIRGINIA.

Year	Temperature			Precipitation
	Mean	Highest	Lowest	
1891	52.0	...	....	45.96
1892	52.1	99	−12	38.33
1893	52.0	99	−25	39.82
1894	53.5	103	−29	34.52
1895	51.5	107	−21	32.82
1896	53.6	97	−10	43.49
1897	53.5	103	−18	41.59
1898	54.8	103	−13	47.61
1899	53.2	100	−35	40.97
1900	54.1	104	−11	37.62
1901	52.1	104	−11	44.78
1902	52.8	104	−14	42.19
1903	52.0	105	−19	40.55
1904	50.9	98	−20	33.33
1905	52.3	100	−22	45.53
1906	54.0	101	−11	44.36
1907	51.7	98	−23	52.15
1908	53.7	101	−16	40.47
1909	53.0	101	−10	43.02
1910	52.3	98	−11	38.60
1911	54.6	106	− 5	47.13
1912	51.7	100	−34	43.78
1913	53.9	103	− 4	49.02
1914	52.3	106	−22	39.71

TEMPERATURE AND PRECIPITATION FOR WEST VIRGINIA 1914.

Month	Temperature in degrees Fahrenheit				Precipitation in inches				Sky			Prevailing direction of the wind.
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest local amount	Number of rainy days	Clear	Pt. Cloudy	Cloudy	
January	35.8	+3.5	83	−11	3.18	−0.73	1.90	10	7	6	18	w.
February	28.4	−3.3	70	−22	3.64	+0.49	3.40	10	9	7	12	w.
March	37.3	−6.5	83	−13	3.03	−1.22	1.60	12	10	8	13	w.
April	52.1	+0.7	93	16	4.63	+0.83	2.25	11	10	9	11	w.
May	62.4	+0.1	100	23	1.96	−2.03	2.05	6	18	8	5	w.
June	72.0	+3.0	104	30	3.00	−1.71	2.40	8	15	11	4	w.
July	73.1	−0.1	106	38	4.11	−0.71	3.15	7	16	10	5	w.
August	71.8	+0.3	100	40	4.86	+1.24	4.00	10	15	9	7	w.
September	63.2	−3.1	97	24	1.58	−1.33	3.00	5	18	6	6	w.
October	57.3	+2.8	91	14	2.94	+0.29	2.52	9	12	8	11	w.
November	42.6	−0.2	84	2	1.32	−1.28	2.15	5	16	6	8	w.
December	30.3	−3.8	70	−20	5.46	+2.38	4.00	16	7	4	20	w.
Annual	52.2	−0.6	106	−22	39.71	−3.78	4.00	109	153	92	120	w.

CLIMATOLOGICAL DATA FOR THE YEAR 1914

Stations.	Counties.	Elevation, feet.	Temperature (degrees Fahrenheit).						Precipitation (inches).							Number rainy days.	Sky.			Prevailing direction of wind.
			Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.	Total snowfall.		Number clear days.	Number partly cloudy days.	Number cloudy days.	
PANHANDLE SECTION																				
Bayard	Grant	2,500	13	47.2	91	July 12*	−21	Feb. 25	13	50.46	6.86	Apr.	1.66	May	128.2	135				w.
Burlington	Mineral	875	21	50.6	98	June 25	−16	Feb. 25	21	32.46	4.80	Aug.	1.00	May	74.0	68	110	196	59	w.
Franklin	Pendleton	641	9		91	June 21			9											
Harpers Ferry	Jefferson	244							26	33.57	4.57	Apr.	0.86	Sept.	31.4	78				w.
Lost City	Hardy		9		88	June 11*	− 8	Feb. 26	9		4.02	Dec.	1.04	May						w.
Martinsburg	Berkeley	435	23	52.6	100	July 23*	− 4	Dec. 27	24	34.50	4.58	Aug.	0.82	Sept.	38.0	93	213	80	72	nw.
Moorefield	Hardy	900	19				−10	Feb. 25*	20											nw.
Romney	Hampshire	824	18		100	Aug. 20			18											
Upper Tract	Pendleton	1,230	17	51.9	97	June 21	−13	Dec. 15	18	27.42	4.57	July	0.55	May						w.
Averages and extremes				50.6	100	July 23*	−21	Feb. 25		35.68	6.86	Apr.	0.55	May	67.9	94	161	138	66	w.
NORTHERN SECTION																				
Bens Run	Pleasants	622	14	53.2	100	July 12	− 4	Feb. 25	15	42.35	9.29	Aug.	0.77	Sept.	84.5					
Buckhannon	Upshur	1,411	19	50.8	94	July 12	−14	Dec. 16	25	46.78	6.57	Aug.	1.05	Sept.	76.0	114	202	42	121	
Cairo	Ritchie	674	13	53.9	102	July 13	−17	Feb. 25	15	43.52	6.30	Dec.	1.02	Sept.		125	56	172	133	
Central Station	Doddridge	950	18		101	July 12	−18	Feb. 25	20	27.70	5.18	Dec.	0.55	May	69.0					
Cheat Bridge	Randolph	3,600							3	45.61	6.60	June	1.50	Sept.		113				
Cortland	Tucker	3,300							3	51.13	7.28	July	1.13	Nov.						
Creston	Wirt	701	14	54.8	105	July 12	−11	Feb. 25	15	35.93	5.48	Apr.	0.96	Sept.	44.1	115	112	95	158	sw.
Davis	Tucker	3,090							8	52.95	6.68	Apr.	1.66	Nov.	145.5	164				sw.
Elizabeth	Wirt	646							4	34.77	4.72	Dec.	0.75	Sept.		95				
Elkins	Randolph	1,940	15	50.1	95	June 10	−10	Feb. 25	15	41.36	6.97	Apr.	0.52	Sept.	60.7	154	95	116	154	w.
Fairmont	Marion	884	10	52.3	102	July 12	−12	Dec. 16	22	40.55	6.88	Dec.	0.97	Sept.	66.0	137	221	17	127	w.
Glenville	Gilmer	738	22	54.1	101	June 21*	−13	Dec. 16	28	35.30	6.10	Apr.	0.23	Sept.	66.0	83	168	86	111	w.
Grafton	Taylor	1,000	23	52.7	98	June 10*	−15	Dec. 16	24	41.39	6.68	Dec.	1.02	Sept.	73.0	116	184	59	122	w.
Lost Creek	Harrison	1,026	18	50.0	99	July 12	−22	Feb. 25	19	33.49	6.17	Dec.	0.88	Sept.	58.0	89	192	55	118	w.
Mannington	Marion	974	13	50.9	96	July 12	−20	Feb. 25	14	42.19	6.22	Aug.	1.30	Nov.	70.6	147	162	60	143	w.
Morgantown	Monongalia	1,250	23	52.4	96	July 12*	−10	Feb. 25	41	41.97	6.72	Oct.	1.10	Nov.	48.7	91				
Moundsville	Marshall	642	13		102	July 12	−10	Feb. 25	13											
New Cumberland	Hancock	987	18	50.5	97	July 12*	−14	Feb. 25	23	34.70	4.80	Dec.	1.40	Nov.	41.0	80	121	65	179	s.
New Martinsville	Wetzel	634	22	54.1	103	July 12	− 8	Feb. 25	23	41.95	7.76	Dec.	0.91	Sept.		95	138	110	117	s.
Parkersburg	Wood	638	27	54.0	100	July 12	− 7	Feb. 25	27	31.79	5.05	Aug.	0.62	Sept.	40.2	126	136	102	127	n.
Parsons	Tucker	1,656	16	49.1	92	July 11*	−15	Feb. 25	16	45.18	7.11	Dec.	1.05	May	97.0	115	141	120	104	
Philippi	Barbour	1,149	19	51.9	99	July 12	−22	Feb. 25	23	42.85	8.04	Dec.	1.14	Sept.	90.1	158	148	108	109	w.
Pickens	Randolph	2,697	13	49.0	89	June 11	−11	Dec. 15	25	59.95	10.05	Apr.	0.85	Sept.	149.0	133	185	62	118	w.
Rowlesburg	Preston	1,375							30	47.97	7.12	Dec.	1.06	Sept.	77.3	162				w.
Saint Marys	Pleasants	577							8	36.80	4.70	Dec.	0.50	Nov.	64.0	91				
Smithfield	Wetzel	835	10	51.1	102	July 12	−20	Feb. 25	12	42.43	6.01	Aug.	1.67	Nov.	95.3	129	145	118	102	n.
Terra Alta	Preston	2,612	15		90	Aug. 20			15											
Wellsburg	Brooke	1,225	15	49.9	91	June 25*	− 6	Feb. 24*	22	36.14	5.37	Dec.	1.16	Sept.	70.8	113				w.
Weston	Lewis	1,026	20				−15	Dec. 16	26											sw.
Wheeling	Ohio	645	29	52.3	99	June 9	− 8	Feb. 25	31	38.21	7.54	Dec.	1.19	Sept.	40.0	142	169	53	143	s.
Averages and extremes				51.9	105	July 12	−22	Feb. 25		41.29	10.05	Apr.	0.23	Sept.	73.9	120	151	85	129	w.
SOUTHERN SECTION																				
Bancroft	Putnam	574	11				−	Dec. 16	13	44.12	7.18	Aug.	1.05	Nov.	35.5	113	126	16	223	ne.
Beckley	Raleigh	2,440	15		91	June 11*	−1	Dec. 15	17											w.
Bluefield	Mercer	2,558	20	53.3	95	June 27	−	Dec. 16	22	27.55	3.90	Jan. Mch.	0.62	June	70.0					
Charleston	Kanawha	597	12	57.0	100	July 12	Zero	Dec. 15*	30	45.49	6.87	Dec.	1.12	Nov.	54.4	135				w.
Cuba	Jackson	650	13		103	July 12	−19	Feb. 25	17											w.
Elkhorn	McDowell	1,933	21	53.8	95	June 26*	1	Dec. 16	23	42.91	5.91	Dec.	1.10	May	68.1	106	117	163	85	w.
Green Sulphur Springs	Summers	1,600	19	52.1	98	July 12	−11	Dec. 27	19	35.41	5.32	Dec.	1.04	Sept.	72.2	124	146	101	118	w.
Hinton	Summers	1,450	18	53.7	99	July 12	− 3	Dec. 16*	26	36.34	5.26	Dec.	1.12	Sept.	72.0	125	161	18	186	sw.
Holcomb	Nicholas	2,042	3	50.3	95	June 25*	− 7	Feb. 17	3	45.34	7.51	Aug.	1.05	June	111.0	123	153	34	178	
Huntington	Cabell	538	19	54.7	104	July 12	− 2	Dec. 16*	20	38.35	5.14	Dec.	1.00	Nov.	34.0	104	180	22	163	w.
Lewisburg	Greenbrier	2,200	15	50.8	96	June 26*	−12	Dec. 16*	24	37.67	5.30	Dec.	0.96	May	80.0	102	231	53	81	nw.
Madison	Boone	688	13		104	July 12			14											
Marlinton	Pocahontas	2,131	16		89	June 9*			18											
Nuttallburg	Fayette	2,252	22				2	Dec. 16*	23											
Point Pleasant	Mason	553	22	54.9	106	July 12	−17	Feb. 25	25	38.69	5.14	Apr.	1.14	Nov.	34.0	119	155	46	164	sw.
Powellton	Fayette	933	19	55.8	102	June 25	− 2	Dec. 15	21		6.23	July	1.75	June						
Robertsburg	Putnam	574	15	53.5	104	July 12	−10	Dec. 16*	15	33.56	5.65	Dec.	1.14	Nov.	32.8	99	162	19	184	
Ryan	Roane	700	12	52.8	98	July 11*	−15	Dec. 16	13	39.11	5.76	Aug.	1.07	Nov.	61.9	126	145	94	126	
Spencer	Roane	784	11	52.9	98	June 25	−14	Dec. 16	16	44.31	6.51	Dec.	1.73	Nov.	54.8	92	86	173	106	
Sutton	Braxton	839	9		101	July 12			15	36.01	5.58	July	1.24	May	65.2					
Union	Monroe	2,250	11	51.6	96	July 12*	−10	Dec. 27	12	29.86	4.12	Dec.	0.97	June						
Williamson	Mingo	660	15	53.0	97	July 12	1	Dec. 15*	15	37.82	5.76	July	0.80	June	31.8	127	181	59	125	w.
Averages and extremes				53.3	106	July 12	−19	Feb. 25		38.28	7.51	Aug.	0.62	June	58.5	115	154	66	145	w.
State averages and extremes				52.3	106	July 12	−22	Feb. 25		39.71	10.05	Apr.	0.23	Sept.	67.7	116	153	81	131	w.

* And other dates.

Monthly and Annual Mean Temperatures for the Year 1914, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September		October.		November		December.		Annual.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
PANHANDLE SECTION																										
Bayard	31.0	+3.5	24.0	−3.2	31.0	−8.3	47.0	0.0	57.0	−0.2	67.0	+3.6	67.5	−0.3	66.6	+0.9	57.2	−3.3	51.7	+2.8	39.2	+1.0	26.6	−3.0	47.2	−0.5
Burlington	33.4	+2.9	26.0	−3.9	35.3	−6.5	50.1	−0.6	62.2	+0.5	70.8	+2.4	71.8	−1.1	70.2	−1.0	61.0	−4.0	56.0	+2.5	40.9	−1.5	29.0	−3.8	50.6	1.2
Franklin	34.2	.....	27.6	.....	36.2	.....	46.2	.....	57.8	.....	66.5	.....	65.0	.....	65.4	.....	.....	.....	53.8	.....	40.7	.....	.....	.....	.....	.....
Lost City	34.6	.....	27.4	.....	35.6	.....	48.6	.....	60.8	.....	68.2	.....	69.1	.....	67.8	.....	59.5	.....	55.0	.....	.....	.....	29.2	.....	.....	.....
Martinsburg	34.0	+3.9	25.2	−4.5	37.4	−3.9	50.8	−0.4	66.2	+3.0	73.8	+3.1	75.4	0.0	74.6	+1.6	64.2	−2.4	58.2	+3.9	42.6	−0.3	29.2	−3.0	52.6	+0.1
Moorefield	33.8	+1.9	26.4	−5.2	37.8	−5.9	54.9	+3.0	64.2	+1.0	72.7	+3.6	.....	.....	.....	.....	56.8	.....	59.2	+4.6	45.8	+2.4	28.4	−5.2	.....	.....
Romney	.....	.....	.....	.....	39.2	−3.6	.....	.....	.....	.....	.....	.....	72.8	−2.5	71.8	−0.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Upper Tract	36.6	+3.0	30.1	−1.7	37.7	−6.5	52.3	+1.1	62.1	+0.3	71.2	+3.2	71.2	−1.3	71.0	−0.1	62.4	−4.0	55.5	+0.4	43.3	−0.3	29.2	−5.1	51.9	0.9
NORTHERN SECTION																										
Bens Run	35.7	+4.1	27.4	−3.5	37.4	−6.8	52.8	+0.9	63.5	−0.1	72.4	+2.1	75.2	0.0	74.2	+0.3	66.5	−1.9	60.0	+4.1	42.2[f]	−0.8	31.0	−2.3	53.2	−0.3
Buckhannon	35.4	+4.1	27.6	−3.4	36.2	−5.9	50.6	−0.3	61.1	−1.1	70.5	+1.6	71.1	−1.4	69.8	−0.4	60.3	−4.6	55.2	+2.4	41.9	+0.7	29.8	−3.3	50.8	−1.0
Cairo	36.2	+2.2	28.2	−4.3	38.8	−7.9	53.4	−1.2	64.1	+0.2	73.0	+2.6	75.7	+1.4	74.8	+1.8	65.7	−2.4	60.2	+2.8	45.8[e]	+2.2	31.0	−3.3	53.9	−0.5
Central Station	36.0	+5.0	28.6	−1.6	37.3	−5.4	52.5	+1.3	62.0	+0.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29.0[d]	−4.0	.....	.....
Creston	38.2	+5.4	30.4	−1.3	38.4	−6.2	55.0	+2.7	65.0	+1.6	74.6	+4.1	75.7	+1.1	74.8	+1.7	66.1	−1.5	60.0	+5.4	46.6	+3.3	32.6	−1.5	54.8	+1.2
Elkins	35.2	+6.2	28.0	−3.5	34.0	−5.1	49.2	+0.5	60.1	+1.0	69.5	+2.9	69.8	−0.7	69.6	+1.2	60.5	−1.4	55.2	+3.8	41.4	+1.8	28.7	−3.8	50.1	+0.2
Fairmont	34.2	−0.4	26.4	−7.2	36.3	−6.4	51.6	−0.5	63.8	+1.2	72.6	+2.1	74.8	+0.4	73.6	+1.0	65.0	−3.4	58.6	+3.6	42.3	−0.4	28.8	−5.4	52.3	−1.3
Glenville	37.4	+5.0	30.5	−1.1	38.7	−5.8	55.4	+2.5	65.0	+1.6	73.3	+2.7	76.8	+2.2	73.2	−0.2	64.0	−3.7	59.2[m]	+4.2	44.2	+0.8	31.4	−3.7	54.1	+0.4
Grafton	37.6	+5.9	29.7	−1.3	38.0	−5.3	54.0	+2.6	63.0	+0.8	72.4	+3.3	73.2	+0.2	71.6	0.0	62.7	−4.0	57.4	+2.4	41.6	−1.3	30.8	−3.3	52.7	0.0
Lost Creek	33.7	+1.1	25.0	−5.3	34.4	−9.4	49.2	−0.6	59.1	−1.9	68.9	+1.1	70.3	−2.2	69.2	−1.6	59.7	−5.8	56.8	+2.4	44.4	−2.4	29.8	−3.3	50.0	−1.9
Mannington	34.7	+4.4	26.6	−3.6	36.4	−8.3	51.4	+0.1	60.8	−0.7	69.8	+1.4	71.2	−1.6	70.4	−0.8	61.5	−4.5	56.6	+3.0	41.9	+1.2	29.4	−3.3	50.9	−1.1
Morgantown	36.4	+4.7	27.0	−4.1	36.8	−6.1	52.4	+1.3	63.7	+1.0	71.2	+2.2	73.2	−0.4	73.0	+0.8	63.8	−4.0	58.2	+3.2	42.7	−0.6	30.2	−4.0	52.4	−0.5
Moundsville	36.2	+4.5	26.6	−4.9	38.9	−6.0	.....	.....	64.4	+1.2	73.0	+3.3	75.6	+1.3	.....	.....	60.6	.....	.....	.....	41.2	−1.7	28.7	−5.4	.....	.....
New Cumberland	32.6	+4.8	22.0	−5.2	36.2	−4.6	49.2	−0.3	61.1	+0.2	69.7	+1.5	71.8	−1.4	72.6	+1.9	62.6	−3.2	58.0	+3.9	41.6	+0.4	28.2	−3.1	50.5	−0.4
New Martinsville	37.6	+5.2	28.4	−3.4	39.2	−4.9	53.6	+0.6	64.4	+0.7	73.3	+1.7	75.5	−0.1	75.0	+0.9	66.2	−2.7	60.0	+3.5	44.0	−0.4	32.2	−2.8	54.1	−0.1
Parkersburg	37.6	+6.3	27.6	−6.1	38.9	−3.4	53.9	+1.0	64.8	+1.5	73.4	+1.9	76.0	+0.3	74.9	+1.6	65.5	−0.7	59.2	+4.8	45.4	+2.2	30.6	−4.7	54.0	+0.4
Parsons	32.0	+0.8	26.7	−2.1	32.0	−9.0	49.6	+0.8	59.1	0.0	68.4	+2.1	69.4	−1.1	68.7	−0.5	59.4	−4.4	55.4	+2.8	40.6	−0.6	27.8	−3.8	49.1	−1.2
Philippi	36.2	+4.4	28.1	−3.0	36.9	−6.7	51.9	+1.0	60.8[i]	−0.8	73.0	+4.7	75.2	+2.4	72.5	+0.8	63.5	−2.2	56.2	+2.2	40.2	−2.9	28.6	−5.0	51.9	−0.4
Pickens	32.4	+1.4	28.0	−3.7	33.2	−7.1	48.1	−0.2	60.1	+0.2	67.5	+2.2	67.0	+2.1	67.0	0.0	58.5	−3.5	54.6	+3.0	41.7	+1.1	29.4	−3.1	49.0	−0.6
Smithfield	32.9	.....	25.6	.....	35.0	.....	49.2	.....	61.9	.....	70.1	.....	73.9	.....	71.6	.....	64.5	.....	59.4	.....	43.1	.....	26.2	.....	51.1	.....
Terra Alta	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67.2	+0.7	68.2	−1.3	70.5	+2.8	59.0	−4.0	55.8	+4.1	38.0	−4.1	29.2[k]	.....	.....	.....
Wellsburg	32.4	+3.8	22.4	−4.5	34.8	−3.2	47.6[d]	−1.0	61.9	+1.0	69.5	+2.0	71.7	−0.2	71.6	+1.6	61.6	−3.5	56.2	+2.8	40.6	−0.5	28.0	−2.9	49.9	0.1
Weston	35.0	+1.5	27.4	−3.9	36.8	−7.8	50.8	−1.6	62.6	−0.9	73.8	+2.8	74.2	−0.7	.....	.....	.....	.....	56.7	+1.9	43.8	+0.6	32.0	−3.3	.....	.....
Wheeling	34.0	.....	24.4	.....	38.2	.....	51.3	.....	64.6	.....	71.8	.....	73.4	.....	73.0	.....	64.4	.....	60.1	.....	42.3	.....	30.2	.....	52.3	.....
SOUTHERN SECTION																										
Bancroft	39.6	+5.1	32.3	−0.8	40.6	−5.3	.....	.....	64.6	−0.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.6	−1.5	31.5	−4.5	.....	.....
Beckley	37.6[l]	+5.2	30.8[m]	−1.2	.....	.....	51.2	+2.2	60.2	+0.6	71.2	+4.0	70.9	−0.6	70.6	+1.1	62.2	−1.3	56.0	+2.0	42.8	+0.6	33.0	−0.7	.....	.....
Bluefield	37.4	+3.7	33.8[d]	+0.7	38.4[d]	−6.0	55.1[e]	+1.7	62.0[f]	−0.4	73.8[e]	+5.0	72.0[d]	+0.1	72.0[f]	+0.6	63.8[g]	−2.5	56.8[g]	+1.5	43.0[f]	−1.4	31.8	−3.4	53.3	0.0
Charleston	43.5	+5.7	35.2	−3.0	43.7	−6.6	57.6	+1.0	66.3	+0.3	76.0	+3.6	76.2	−0.2	75.1	−0.4	67.2	−3.6	60.2	+1.9	47.0	−1.0	35.6	−5.2	57.0	0.6
Clay	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58.5[k]	.....	43.7	.....	32.4	.....	.....	.....
Cuba	38.0	+5.1	27.3	−4.6	38.3	7.1	.....	.....	69.2	0.0	72.6	+3.8	74.6	+1.4	72.8	+0.9	64.0	−3.3	58.0	+3.2	43.8	+0.5	30.8	−3.3	.....	.....
Dunlow	43.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elkhorn	39.0	−2.7	34.2	1.2	38.4	−8.4	53.4	+0.3	62.3	−0.4	73.0	+4.5	72.9	+0.8	71.5	+0.3	64.3	−2.2	58.2	−2.7	45.4	−0.3	33.4	−4.1	53.8	0.4
Green Sulphur Springs	34.8	+2.3	30.8	−1.2	37.6	−6.4	52.2	+1.4	61.5	−0.2	72.6	+4.1	72.0	−0.5	71.6	0.0	63.0	−3.4	56.4	+2.0	41.2	−2.4	31.0	−3.1	52.1	−0.6
Hinton	35.0	+0.5	31.3	−2.9	38.6	−6.8	53.6	+0.3	64.2	−0.1	75.4	+4.8	75.6	+1.1	74.2	+0.1	65.8	−2.6	58.8	+2.4	41.2	−3.3	31.2	−4.8	53.7	−0.9
Holcomb	33.5	.....	29.5	.....	33.9	.....	50.4	.....	60.4	.....	70.4	.....	70.3	.....	69.4	.....	61.2	.....	55.4	.....	38.9	.....	29.8	.....	50.3	.....
Huntington	37.5	+4.9	29.8	−2.1	39.2	−6.2	55.5	+1.9	65.8	+0.9	76.5	+4.0	77.7	+1.1	75.4	+0.7	65.1	−3.8	58.0	+2.0	44.0	+0.4	32.1	−2.4	54.7	−0.1
Lewisburg	34.2	+2.5	29.6	−1.8	35.8	−7.9	51.2	+1.1	60.5	−0.4	71.4	+4.0	70.9	−0.6	69.8	−0.2	61.2	−3.7	55.6	+2.6	40.8	−0.5	29.1	−3.7	50.8	−0.7
Logan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76.6	+1.4	75.3	+1.2	70.4	+0.9	65.9	.....	.....	.....	.....	.....	.....	.....
Madison	37.5[g]	.....	33.0[d]	.....	40.0[i]	.....	55.8	.....	65.5[b]	.....	75.4	.....	76.2	.....	74.3	.....	65.3	.....	57.6[b]	.....	.....	.....	.....	.....	.....	.....
Marlinton	31.7	+3.2	27.6	−1.6	35.0	−5.0	48.6	+1.1	53.9	−5.4	65.8[g]	−0.1	65.8	−3.6	65.6	−2.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nuttallburg	33.6	+2.1	25.9[e]	−6.2	.....	.....	.....	.....	57.3[g]	.....	.....	.....	.....	.....	66.2[b]	.....	56.7[b]	.....	53.0[l]	.....	.....	.....	28.2[d]	−5.5	.....	.....
Point Pleasant	38.6	+5.2	28.7	−4.4	40.0	−6.0	55.8	+0.9	65.0	−0.6	75.4	+2.5	77.2	+0.6	75.6	+0.7	66.6	−3.3	58.8	+1.4	45.4	+0.4	31.8	−3.6	54.9	−0.5
Powellton	39.3	+3.6	34.0	−0.8	41.5	−4.9	55.0	+0.9	64.8	+0.7	75.8	+5.3	74.6	+0.4	74.0	+1.3	65.3	+1.9	58.8	+3.9	44.8[l]	+0.4	36.4	.....	55.8	.....
Princeton	33.0	+1.3	28.9	−2.9	34.9	−8.0	49.4	0.0	57.9	−1.5	67.2	+2.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Robertsburg	36.6	+2.7	27.4	−5.5	37.2	−9.4	53.8	+0.8	63.0	−1.4	74.6	+3.4	76.6	+0.7	75.4	+0.8	66.2	−2.6	58.7	+1.6	42.8	−0.6	30.1	−4.7	53.5	−1.4
Ryan	37.4	+4.3	28.3	−4.8	37.1	−8.7	54.0	+1.5	61.8	−0.8	72.8	+3.9	74.4	+1.6	72.9	+1.1	62.9	−3.9	57.9	+4.4	42.2	−1.0	31.4	−2.9	52.8	0.2
Spencer	37.9	+4.9	28.1	.....	36.8	.....	51.8	.....	62.8	.....	71.6	.....	72.6	.....	72.4	.....	64.0	.....	59.6	.....	46.0	.....	31.3	.....	52.9	.....
Sutton	.....	.....	33.1[d]	.....	37.8[e]	.....	56.4[f]	.....	64.4[f]	.....	74.8	.....	75.0[l]	.....	74.2[k]	.....	66.0[l]	.....	57.9	.....	.....	.....	.....	.....	.....	.....
Union	34.6	+1.6	30.2	−2.8	37.0	−7.1	51.8	+1.1	60.7	+0.1	71.5	+5.1	72.2	+1.1	71.4	+0.7	63.7	−1.3	57.2	+4.9	39.4	−0.7	29.4	−3.1	51.6	0.0
Williamson	36.0	0.0	30.4	−6.0	37.8	−11.0	53.6	−1.8	63.2	−3.0	74.5	+2.4	73.3	−2.7	72.7	−2.6	64.6	−5.7	57.8	−0.5	41.0	−4.4	30.8	−6.9	53.0	−3.5

Monthly Maximum Temperatures for the Year 1914, with Dates.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
PANHANDLE SECTION.																								
Bayard	72	29	52	3	69	27	82	19	88	25	90	11*	91	12	91	20	88	2	81	10	68	7	57	2*
Burlington	67	28	53	1	64	16	84	18	94	26	98	25	92	12*	94	22	91	2*	86	10	75	4	58	2*
Franklin	64	28*	55	5	70	16	87	24	82	11	91	21	87	24	86	23	.....	.....	75	6*	70	3	.....	.....
Lost City	70	30	60	1	66	27	75	29	86	27	88	11*	88	25	88	20	88	21	78	10	.....	.....	60	2
Martinsburg	62	29	50	1*	77	27	84	19*	97	27	99	10*	100	23	100	19*	96	2	84	10	78	4	60	2
Moorefield	72	29	50	18*	75	27	88	18	96	26	98	10	.....	.....	.....	.....	86	7	86	12	76	3*	64	2
Romney	.....	.....	.....	.....	74	27	.....	.....	.....	.....	98	25	97	23	100	20	94	2*	.....	.....	.....	.....	.....	.....
Upper Tract	75	29	56	4*	72	27	87	28	93	27	97	21	94	22	96	20	94	22	82	6*	73	3*	58	2
NORTHERN SECTION.																								
Bens Run	70	29	55	6	73	26	86	28	92	29	95	24	100	12	95	20	92	2*	86	5*	75	7	66	1
Buckhannon	79	29	58	4	74	31	86	28	90	28*	92	9*	94	12	90	8	87	2	82	10	70	3*	64	1
Cairo	74	29*	58	3	78	26*	90	29	97	30	98	10*	102	13	97	21	94	22*	88	6*	84	5	70	1
Central Station	78	29	64	2*	77	26	90	28	94	29	96	10*	101	12	94	.....	94	.....	90	.....	79	7	62	1*
Creston	74	29	62	2*	77	26	92	28	100	29	102	24	105	12	99	8*	96	21	91	7	84	2	67	1
Elkins	78	29	58	3	70	26	85	28	90	29	95	10	92	12	90	20	89	2	86	10	71	3	59	2
Fairmont	81	29	59	2	75	26	91	22*	95	29	99	25	102	12	97	20	97	21	89	10	74	7	62	1
Glenville	80	29	62	3	80	26	92	28	98	29	101	21	101	12	97	20	97	1	90	8	74	7	62	1*
Grafton	76	29	62	3	74	26	88	18*	94	25*	98	10	98	12*	96	7*	96	23	78	6*	72	7	62	1
Lost Creek	79	29	58	3	74	26	88	25	91	29	93	10*	99	12	92	8	92	21	88	10	74	3*	64	1
Mannington	79	29	55	2	73	26	88	28	90	25*	93	9*	96	12	92	20	90	22	85	10	74	7	61	1*
Morgantown	79	29	58	18	73	26	87	28	91	29	94	9	96	12*	93	8*	90	21	83	9	72	7	61	1*
Moundsville	75	29	57	3	76	26	91	28*	97	29	99	24	102	12	.....	.....	96	21	.....	.....	76	8	68	2
New Cumberland	70	29	50	3	70	26	87	28	93	29	95	9*	97	12*	96	6*	94	21	85	5	74	7	64	2
New Martinsville	75	29	57	6	76	26	90	28	93	25*	97	9	103	12	96	19	95	21	89	10	76	7	65	2
Parkersburg	73	29	55	2	75	26	89	28	96	29	97	25	100	12	97	20	92	2	84	6	76	7	64	1
Parsons	80	29	57	2	72	26*	86	28	89	25	91	23	92	11*	89	9*	87	22	85	9*	71	3*	61	2
Philippi	82	29	56	7	75	26	89	26*	94	29	97	21*	99	12	98	9	92	22	90	9	70	7*	58	2
Pickens	80	29	55	3	71	26	82	28	88	12	89	11	87	12	84	20	82	2*	82	22	75	3	59	2
Smithfield	83	29	65	6	74	25*	91	28	95	26*	98	9*	102	12	97	20	92	2	89	5	78	13	62	1
Tera Alta	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88	9	88	13	90	20	88	22	84	11	71	7	62	2
Wellsburg	68	29	50	3*	68	26	83	28	88	29	91	25	90	12*	91	8*	86	2*	81	9	70	7	62	2
Weston	82	29	58	2*	70	26*	88	28	94	27*	94	8*	98	12	.....	.....	.....	.....	86	10	76	7	66	1
Wheeling	75	29	53	2*	75	26	91	28	95	26*	99	9	98	12	97	20	95	22	87	8*	77	7	62	1
SOUTHERN SECTION.																								
Bancroft	80	28*	70	3	79	25	.....	.....	97	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76	3	62	2
Beckley	73	29	68	3	.....	.....	84	28	88	29	91	11*	91	12	90	19*	85	1*	81	5*	72	13	68	1
Bluefield	74	29	61	3	69	16	84	27	89	28*	95	27	94	12	92	20	87	22	82	9*	71	3*	59	1
Charleston	79	29	64	3	77	26	90	28	96	29	98	22*	100	12	95	19*	92	2	86	7*	78	7	66	1
Clay	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78	7	62	2
Cuba	73	29	56	6	75	26	.....	.....	97	29	99	26	103	12	96	20	92	21	89	7	77	7	67	1
Dunlow	80	30	.....	.....	.....	.....	92	27	100	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77	11	.....	.....
Elkhorn	75	29	60	3*	70	16*	86	28	89	25	95	26	95	12	93	20	86	2	81	7*	73	7	62	1
Green Sulphur Springs	73	29	61	3	74	16*	87	28	92	29	96	25	98	12	94	20	90	21*	84	10	73	4*	60	1
Hinton	74	29	62	3	75	16	89	28	95	29	98	23*	99	12	97	20	94	22	88	7	77	4	58	1*
Holcomb	78	29	62	3	71	26	86	28	92	29	95	25	95	12	93	20	90	2	85	10	73	3	60	1*
Huntington	70	29	58	6	77	26	91	28	97	29	98	10*	104	12	96	20	91	2	80	6*	74	7	65	1
Lewisburg	70	29	58	3	71	26	84	28	92	26	96	25*	95	12	90	20	87	2	81	10	71	4	59	1*
Logan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95	12*	90	20	89	19*	84	9	.....	.....	.....	.....
Madison	79	29	65	3	78	26*	92	28	98	29	100	23	104	12	96	20	91	1*	88	7	.....	.....	.....	.....
Marlinton	66	29	54	3	65	16*	78	28	86	29	89	9*	89	12	86	20	.....	.....	.....	.....	.....	.....	.....	.....
Nuttallburg	63	29	50	22	.....	.....	.....	.....	89	29	.....	.....	.....	.....	83	19	79	22	73	7	.....	.....	60	1
Point Pleasant	74	29	58	2*	78	26	91	28	98	29	104	24	106	12	100	20	95	2*	90	6	78	3*	65	1
Powellton	83	29	66	2	78	26	91	27	97	29	102	25	100	12	97	20	92	2	86	9*	76	4*	65	2
Princeton	66	29	54	3	66	26	82	28	84	25	87	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Robertsburg	74	29	59	2	78	26	92	27	98	29	100	26	104	12	99	20*	95	2*	90	5*	75	7*	64	1
Ryan	79	29	62	3	77	26	89	28	93	29	97	24	98	11*	94	22	91	21*	85	5*	78	3	63	1*
Spencer	82	29	65	2	83	26	93	28	95	29	98	25	96	8	94	20	91	23	89	7	82	4*	67	1
Sutton	.....	.....	62	3	78	26	91	28	97	29	99	9*	101	12	96	20	95	.....	90	10	78	3	69	1
Union	69	29	58	1*	72	16	85	28	93	29	95	25	96	12	96	20	90	2*	85	11	72	4	60	1
Williamson	76	29	60	3	75	26	88	28	95	29	96	27	97	12	91	20	91	2	83	6	74	4*	62	2

* Also other dates.

Monthly Minimum Temperatures for the Year 1914, with Dates.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
PANHANDLE SECTION																								
Bayard	−11	14	−21	25	−13	12	18	6	24	1	30	17	38	31	40	16	24	29	23	27	2	22	−15	26
Burlington	3	14	−16	25	− 2	12	20	6	28	1	36	17	43	30	48	26	29	29	26	28	8	24	−13	27
Franklin	2	14	5	17	4	21	25	6	29	1	37	17	40	31	47	16	.....	.....	20	28	13	21	.....	.....
Lost City	8	13	− 8	26	2	21	22	6	32	1	39	17	44	31	45	18	32	29	24	27	.....	.....	− 6	27
Martinsburg	4	14	0	26	13	2	25	6	38	1	46	17	50	31	52	1	36	29	32	27*	17	24	− 4	27
Moorefield	3	14	−10	25	7	22	22	6	38	2*	47	20	.....	.....	.....	.....	32	10*	28	29	16	19	−10	16*
Romney	.....	.....	.....	.....	5	13	.....	.....	.....	.....	.....	.....	47	31	50	16	.....	.....	.....	.....	.....	.....	−10	27
Upper Tract	1	14	−11	25	− 2	21	21	6*	28	1	36	17	43	31	46	16	30	29	28	28	9	24	−13	15
NORTHERN SECTION																								
Bens Run	8	14	− 4	25	9	2*	24	10	35	1	45	17	51	31	56	1*	41	26	29	27	11	24	− 2	16
Buckhannon	2	14	−13	25	0	12	20	10	29	1	38	17	43	31	48	1*	29	29	22	28	10	24	−14	16
Cairo	4	14	−17	25	2	12	20	10	30	1	40	17	50	30	50	16	31	29	22	28	10	24	−12	16
Central Station	1	14	−18	25	− 2	12	19	10	28	1	37	17	43	.....	49	.....	30	.....	25	.....	9	.....	−17	16
Creston	6	13	−11	25	2	12	26	10	32	1	41	17	47	31	50	22	34	29	24	28	11	24	−10	16
Elkins	1	14	−10	25	− 3	21	20	10	29	1	37	17	43	31	47	1	29	29	24	28	8	24	−10	16
Fairmont	3	14	−11	25	3	12	20	10	31	1	40	17	47	31	51	16	34	29	28	28	14	18*	−12	16
Glenville	4	14	−12	25	0	12	21	6	34	1*	40	17	52	30	46	3	34	30	.....	.....	12	24	−13	16
Grafton	2	14	−14	25	4	21	20	10	31	1	39	17	45	31	49	1	33	29	24	28	12	24	−15	16
Lost Creek	− 1	14	−22	25	− 5	12	16	6*	25	1	34	17	40	31	41	1	25	29	27	28	9	24	−20	16
Mannington	− 5	14	−20	25	− 2	12	20	10	29	1	37	17	44	31	49	16	31	29	24	28	10	24	−19	16
Morgantown	3	14	−10	25	6	2*	24	9	31	1	41	17	49	30*	51	11	31	29	27	27	15	21	− 5	16
Moundsville	3	14	−10	25	8	2	.....	.....	31	1	39	17	46	30	.....	.....	33	17	29	27	18	20*	− 4	16
New Cumberland	− 5	14	−14	25	8	2*	21	6*	30	1	36	17	46	31	48	13	31	28	28	28	12	24	− 5	15*
New Martinsville	6	14	− 8	25	9	2	24	10	35	1	43	17	50	30*	53	16	38	29	29	28	14	24	− 6	16
Parkersburg	12	14	− 7	25	9	2	26	10	38	1	48	20	53	31	57	16	39	27	29	27	16	20	− 5	16
Parsons	− 5	14	−15	25	− 8	21	17	10	29	2*	34	17	42	31	46	1	28	29	20	28*	5	24	−14	16
Philippi	3	14	−22	25	2	21	19	10	29	1*	33	17	43	31	49	16	29	29	25	28	11	18*	−20	16
Pickens	− 6	13	− 1	25	− 4	21	18	9*	29	1	40	17	44	31	47	23	34	10*	18	28	8	21	−11	15
Smithfield	− 3	14*	−20	25	− 1	12	26	9	27	1	37	17	43	31	41	26	35	10	29	27	8	24	−14	16
Terra Alta	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36	17	45	29	53	28	26	8	22	28	7	24	− 8	15*
Wellsburg	− 1	14	− 6	24*	6	2	21	9	32	1	42	17	51	30	53	4	37	28	28	28	15	18	− 4	15
Weston	2	14	−12	25*	− 4	21	22	6*	32	2	54	6*	54	3*	.....	.....	.....	.....	24	28	12	24	−15	16
Wheeling	5	14	− 8	25*	12	2*	24	9	34	1*	43	17	49	30	50	16	39	26*	31	27*	12	24*	− 2	15*
SOUTHERN SECTION																								
Bancroft	10	13*	4	17*	7	21	24	10	34	1	48	17	.....	.....	54	1	.....	.....	25	28	12	21	− 6	16
Beckley	5	13	4	25	.....	.....	22	9*	31	1	40	16	46	29	40	16*	31	27*	21	28	11	20*	−10	15
Bluefield	10	12*	8	17	4	21	21	10	33	15	.....	.....	47	30	50	1	36	.....	22	28	12	20*	− 2	16
Charleston	15	13	11	25	11	21	28	9*	38	17	47	17	53	31	53	23	42	26*	26	28	17	21	0	15*
Clay	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	28	11	24	− 4	16
Cuba	6	13	−19	25	0	12	.....	.....	30	1	44	30	47	31	51	16	34	29	23	28	12	18	−12	15
Dunlow	21	1*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elkhorn	12	13	6	17	7	2*	24	10	36	10	50	17	48	30*	52	16	38	27	24	28	13	21	1	16
Green Sulphur Springs	1	14	− 9	17	− 1	21	18	10	30	1	41	17	43	31	46	1	31	29	17	28	9	24	−11	27
Hinton	8	14	0	17	8	21	22	10	34	1	47	17	49	31	50	1	40	29	26	28	11	21	− 3	16*
Holcomb	− 5	13	− 7	17	− 2	21	19	10	30	1*	36	17	40	31	40	1	29	29	18	28	4	24	− 5	15*
Huntington	14	14	7	25	11	2*	26	11	37	1	51	3*	54	30*	52	1	41	27	30	27*	16	20*	− 2	16*
Lewisburg	1	14	− 3	25	− 7	21	17	10	29	1	43	17	43	31	46	1	31	29	20	28	9	24	−12	16*
Logan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55	31	60	2*	49	26	30	28	.....	.....	.....	.....
Madison	10	13	5	25	0	21*	24	10	33	11*	40	17	51	31	50	2	44	26*	25	28*	.....	.....	.....	.....
Marlinton	− 4	14	− 6	17	− 1	21	16	10	23	1	32	17	40	30*	40	1	.....	.....	.....	.....	.....	.....	.....	.....
Nuttallburg	3	13	3	25	.....	.....	21	10	31	1	.....	.....	.....	.....	50	1	34	27	21	28	.....	.....	2	16*
Point Pleasant	9	13*	−17	25	6	12	24	10	32	1	42	17	47	31	53	16	36	29	25	27	13	20*	− 7	16
Powellton	10	13*	2	17	3	21	23	10	33	1	43	17	47	31	47	1	36	27	22	28	15	21	− 2	15
Princeton	4	14	2	17	− 4	21	16	10	29	15	46	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Robertsburg	7	13	− 4	25	2	12	23	10	32	1	44	3	47	31	51	16	35	29	25	28	12	21	−10	16*
Ryan	3	13	− 8	17	0	12	18	10	28	1	39	17	43	31	49	1*	29	28*	20	28	9	24	−15	16
Spencer	6	13	−13	25	− 2	12	19	10	28	1	42	3	45	31	50	16	31	30	23	28	10	24	−14	16
Sutton	.....	.....	− 4	17	− 5	21	20	10	33	2*	39	17	.....	.....	48	1	34	29	14	28	.....	.....	.....	.....
Union	2	14	1	17	− 1	21	17	10	30	1	48	1*	45	31	49	1*	31	27	20	28	7	21	−10	27
Williamson	12	13*	7	17	5	21*	24	10	36	4	50	3*	49	31	49	1	43	26*	23	28	14	20*	1	15*

* Also other dates.

Monthly and Annual Precipitation for the Year 1914, with Departures from Normal

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
PANHANDLE SECTION.																										
Bayard	5.65	+0.52	3.89	+0.46	3.70	−0.90	6.86	+2.89	1.66	−2.73	4.96	−0.11	5.46	+0.38	6.04	+1.71	2.13	−1.11	2.20	−1.28	1.83	−0.72	6.08	+2.34	50.46	+1.39
Burlington	2.80	+0.49	3.90	+1.47	2.00	−1.15	4.22	+1.71	1.00	−2.99	1.92	−2.24	4.09	+0.49	4.80	+1.36	1.60	−1.32	2.50	+0.31	1.05	−0.82	2.58	−0.07	32.46	−2.76
Franklin					1.56				1.60		2.10		4.65		3.65				3.00		1.85					
Harpers Ferry	4.01	+1.24	2.18	−0.36	1.89	−1.33	4.57	+1.67	2.48	−1.28	4.03	+0.38	1.28	−2.15	4.68	+1.06	0.86	−2.05	1.75	−1.13	2.15	−0.17	3.69	+1.03	33.57	−3.09
Lost City	3.19		2.03		1.40		3.09		1.04		3.41		3.19		2.51		1.09		2.98				4.02			
Martinsburg	3.98	+1.58	3.15	+0.75	2.18	−1.10	4.31	+1.37	2.22	−1.19	3.34	−0.84	2.42	−1.62	4.58	+0.93	0.82	−2.06	2.20	−0.39	2.27	+0.07	3.03	+0.43	34.50	−2.07
Moorefield	3.13	+0.57	2.70	+0.27	1.90	−0.71	4.41	+1.71	1.11	−2.75	2.30	−2.84					1.55	−1.23	1.50	−1.23	0.70	−1.03	3.44	+1.17		
Romney													6.09	+2.67	3.13	−0.05	1.80	−0.70								
Upper Tract	1.95	−0.67	2.21	−0.32	1.62	−0.92	2.30	−0.17	0.55	−3.75	2.90	−1.65	4.57	+0.75	1.38	−2.63	1.22	−1.14	2.49	+0.22	1.72	+0.62	4.51	+2.06	27.42	−8.20
NORTHERN SECTION																										
Bens Run	3.08	−0.96	4.34	+0.87	2.61	−1.86	3.93	−0.45	2.48	−2.22	2.95	−1.57	4.02	−0.85	9.29	+5.70	0.77	−1.56	2.98	+0.02	1.41	−1.16	4.49	+0.67	42.35	−3.37
Brandonville			2.39		3.26		5.53		3.14		4.33		4.23		5.31		0.81		3.28		1.24		4.23			
Buckhannon	4.26	+0.30	4.38	+0.62	3.04	−1.45	6.14	+1.93	1.78	−2.43	3.77	−1.19	3.85	−1.64	6.57	+2.82	1.05	−2.06	3.24	−0.14	1.70	−1.85	7.00	+4.09	46.78	−1.00
Cairo	4.58	+0.54	5.27	+1.89	3.23	−0.92	4.85	+1.09	1.98	−1.56	3.22	−0.90	2.44	−2.14	6.09	+2.77	1.02	−1.54	3.03	−0.02	1.51	−1.14	6.30	+2.81	43.52	+0.88
Central Station	2.52	−0.93	2.75	−0.23	1.84	−1.17	2.40	−0.55	0.55	−3.15	3.04	−1.13	2.67	−1.83	1.85	−1.42	1.13	−1.90	2.75	+0.31	1.02	−1.54	5.18	+2.12	27.70	11.42
Cheat Bridge	3.40		3.02		2.80		5.50		1.53		6.60		4.63		5.14		1.50		3.68		1.95		5.86		45.61	
Cortland	5.27		3.81		5.69		6.51		3.13		5.98		7.28		3.48		2.71		1.37		1.13		4.77		51.13	
Creston	1.71	−1.58	3.78	+1.18	2.20	−1.74	5.48	+1.41	2.17	−1.37	1.48	−2.90	3.70	−0.14	4.77	+1.78	0.96	−1.48	2.97	+0.40	1.38	−1.03	5.33	+2.15	35.93	−3.32
Davis	4.61		6.25		5.98		6.68		2.88		4.42		6.55		3.71		2.04		2.78		1.66		5.39		52.95	
Elizabeth	2.33		4.00		2.10		4.26		2.62		1.93		4.16		3.76		0.75		3.04		1.10		4.72		34.77	
Elkins	2.31	−1.03	2.72	−0.45	2.34	−1.73	6.97	+3.68	1.43	−2.55	4.23	−0.81	7.74	+3.10	4.96	+1.31	0.52	−2.35	2.25	−0.17	0.73	−2.13	5.16	+1.74	41.36	−1.39
Fairmont	2.91	−0.81	4.19	+1.28	2.47	−1.68	4.64	+1.05	2.25	−1.78	3.57	−1.14	3.11	−1.84	5.92	+2.62	0.97	−1.69	2.60	+0.06	1.04	−1.78	6.88	+3.63	40.55	−2.08
Glenville	2.72	−1.38	4.41	+0.60	1.97	−2.29	6.10	+2.34	1.45	−2.66	1.37	−3.18	3.64	−1.94	4.87	+0.97	0.23	−3.11	2.17	−0.72	0.80	−2.30	5.57	+1.95	35.30	−11.72
Gratton	2.74	−0.99	4.62	+1.45	2.20	−2.05	4.42	+0.56	2.68	−1.68	4.78	+0.17	2.37	−2.82	5.13	+1.25	1.02	−1.91	3.30	+0.57	1.45	−1.60	6.68	+3.25	41.39	−3.80
Lost Creek	2.01	−1.70	2.62	−0.46	1.42	−3.02	4.39	+0.93	1.89	−2.46	2.80	−1.30	3.18	−1.80	4.98	+0.94	0.88	−2.03	2.06	−0.40	1.09	−1.42	6.17	+2.82	33.49	−9.90
Mannington	3.68	−0.71	2.92	−0.45	2.41	−1.68	4.68	+0.47	2.04	−1.97	4.22	+0.24	4.47	−0.46	6.22	+2.95	1.46	−1.84	2.72	+0.23	1.30	−1.13	6.07	+2.84	42.19	−1.51
Morgantown	2.10	−1.79	1.68	−1.57	1.26	−2.69	5.40	+2.00	2.90	−0.70	4.07	−0.56	3.48	−1.85	5.07	+1.00	2.19	−0.95	6.72	+3.73	1.10	−1.83	6.00	+2.89	41.97	−2.32
Moundsville	2.57	−0.37	1.63	−0.62	0.89	−3.07			2.40	−0.60	4.27	+0.80	1.82	−2.99			1.40	−1.17			0.68	−1.01				
New Cumberland	1.95	−0.46	2.55	−0.01	2.15	−1.46	3.70	+0.18	3.75	+0.59	3.45	−0.18	1.50	−3.14	2.90	−0.31	4.25	+1.71	2.30	−0.47	1.40	−0.36	4.80	+2.35	34.70	−1.56
New Martinsville	3.26	−0.18	3.20	+0.20	2.63	−1.20	4.25	+0.69	2.18	−1.46	3.81	−0.07	3.45	−1.55	5.90	+3.05	0.91	−1.81	3.23	+0.67	1.37	−1.29	7.76	+4.41	41.95	+1.46
Oceola			4.44		6.90		8.85		1.60		5.25		6.90		4.30		1.60		4.29		1.20		5.75			
Parkersburg	1.55	−1.64	3.74	+0.50	2.19	−1.63	4.38	+1.47	1.51	−1.95	2.16	−2.49	2.13	−2.53	5.05	+1.52	0.62	−2.10	2.91	+0.47	0.80	−2.03	4.75	+1.98	31.79	−8.43
Parsons	3.75	−1.15	3.16	−0.20	5.45	+1.15	5.80	+1.98	1.05	−3.07	3.89	−1.93	4.95	−0.35	4.83	+1.21	1.43	−1.79	2.61	−0.24	1.15	−1.38	7.11	+3.34	45.18	−2.43
Philippi	3.42	−0.56	4.19	+0.88	2.20	−2.20	5.65	+1.63	1.90	−2.44	2.88	−1.79	3.37	−1.91	5.65	+1.75	1.14	−2.10	3.09	+0.23	1.32	−1.69	8.04	+4.35	42.85	−3.85
Pickens	5.43	−0.80	6.96	+2.25	7.11	+1.72	10.05	+5.07	2.55	−2.56	2.96	−3.38	4.63	−1.79	6.27	+1.38	0.85	−3.08	3.24	−0.55	1.99	−1.86	7.91	+2.97	59.95	−0.63
Rowlesburg	3.30	−0.88	4.64	+1.41	3.31	−0.92	6.83	+2.82	1.72	−2.56	4.62	−0.34	4.56	−0.42	5.71	+1.94	1.06	−1.81	3.46	+0.68	1.56	−1.52	7.12	+3.45	47.97	+1.85
St. Marys	2.65		4.39		3.01		4.46		1.63		3.33		1.78		7.36		0.82		2.17		0.50		4.70		36.80	
Smithfield	4.43	−1.10	4.83	+1.73	2.84	−1.51	3.28	+0.83	2.92	−0.83	4.49	−0.03	2.48	−2.99	6.01	+2.25	1.80	−1.61	2.16	−1.02	1.67	−1.10	5.52	+1.71	42.43	−3.67
Terra Alta											5.80	−1.49	3.35	−2.56	7.53	+2.66	1.80	−1.97	2.90	−0.48	1.50	−1.78				
Wellsburg	3.07	−0.40	3.24	+0.32	2.03	−1.47	4.14	+0.96	1.89	−1.58	4.26	−0.21	2.06	−2.72	4.45	+0.91	1.16	−1.49	2.64	−0.06	1.83	−0.23	5.37	+2.29	36.14	−3.68
Weston	4.00	−0.13	5.22	+1.53	3.56	−0.97	3.01	−1.34	1.90	−2.40	2.56	−2.13	3.80	−0.85					2.55	−0.49	1.04	−2.38	5.01	+1.52		
Wheeling	2.59	−0.35	3.54	+0.02	2.22	−1.12	4.88	+1.80	2.15	−1.31	4.33	+0.45	1.57	−3.13	4.32	+0.87	1.19	−1.41	2.63	+0.28	1.25	−1.20	7.54	+4.75	38.21	−0.35
SOUTHERN SECTION																										
Bancroft	2.74	−1.13	3.47	+0.58	2.47	−1.62	5.27	+1.31	3.45	−0.65	2.52	−2.20	4.73	−0.19	7.18	+2.51	2.25	−0.43	3.34	+0.54	1.05	−1.41	5.65	+2.67	44.12	−0.02
Beckley	5.00	+1.42	3.78	+0.68			4.07	+0.17	2.38	−0.68	2.37	−1.79	0.98	−3.00	4.40	+1.58	0.17	−2.03	2.81	+0.42	0.95	−1.61	5.57	+2.62		
Bluefield	3.90	+0.90	2.10	−1.11	3.96	−0.10	1.29	−2.43	0.70	−3.17	0.62	−4.76	3.35	−1.01	3.62	−0.46	1.46	−1.05	2.41	−0.12	1.47	−1.04	2.73	−0.28	27.55	−14.63
Charleston	3.19	−0.36	3.74	+0.19	3.35	−1.50	5.18	+1.58	2.27	−2.13	2.76	−2.60	4.92	+0.86	5.01	+0.72	3.98	+1.12	3.10	+0.55	1.12	−1.84	6.87	+3.76	45.49	+0.35
Clay																			4.12		1.30		5.86			
Cuba	1.96	−1.31	3.94	+0.87	2.92	−0.78			2.94	−0.48	1.54	−2.47	2.60	−1.73	3.56	+0.65	0.78	−1.45	3.79	+1.09	1.42	−0.78	4.30	+1.14		
Dunlow	2.53		4.82		4.15		3.09		3.01		3.00		5.90				0.25		3.78		1.66					
Elkhorn	3.24	+0.29	3.19	+0.10	4.77	+0.33	3.53	−0.15	1.10	−3.17	3.15	−2.24	5.55	+0.11	5.55	+1.91	2.32	−0.51	3.18	+0.61	1.42	−1.27	5.91	+2.94	42.91	−1.05
Green Sulphur Springs	3.26	+0.40	2.77	+0.36	2.94	−0.68	3.56	+0.36	1.23	−2.32	2.44	−1.79	4.79	+1.17	4.24	+1.22	1.04	−1.18	2.28	+0.42	1.54	−0.60	5.32	+2.94	35.41	+0.30
Hinton	2.93	0.0	4.12	+1.10	3.66	−0.45	3.30	0.0	1.28	−2.67	1.75	−2.50	4.81	+1.23	4.47	+0.81	1.12	−1.64	2.40	+0.05	1.24	−0.99	5.26	+2.55	36.34	−2.51
Holcomb	4.38		2.66		4.48		6.66		1.75		1.05		4.45		7.51		2.62		3.51		1.06		5.21		45.34	
Huntington	2.40	−1.12	4.34	+1.16	2.66	−1.76	4.34	+0.58	2.00	−2.04	2.04	−2.26	3.73	−0.70	4.68	+1.08	2.34	+0.01	3.68	+1.51	1.00	−1.78	5.14	+1.93	38.35	−3.39
Lewisburg	3.96	+0.49	4.71	+0.84	3.55	−0.50	3.70	+0.31	0.96	−2.05	1.44	−2.75	4.74	+0.77	3.26	−0.12	1.49	−1.26	3.57	+0.84	0.99	−1.56	5.30	+2.47	37.67	−2.52
Logan													5.09	−0.95	4.21	+0.58	1.47	−1.61	3.10	+0.65						
Madison	2.07		3.42		2.83		4.81		1.11		2.38		6.85		4.42		4.59		2.40							
Marlinton	2.51	−0.94	3.19	+0.37	2.54	−1.55	4.58	+1.49	1.54	−2.55	2.37	−2.43	3.73	−1.29	5.22	+0.83										
Nuttallburg	2.89	−0.24	2.66	−0.16	4.16	−0.31	3.63	+0.32	1.85	−1.69	1.70	−2.71	4.16	−0.19	4.49	+1.28	5.65	+3.17	4.30	+1.88			4.17	−1.36		
Point Pleasant	1.92	−1.59	4.56	+0.99	3.52	−0.63	5.14	+1.84	3.70	−0.07	2.32	−2.22	2.78	−1.34	3.46	+0.24	1.66	−0.57	3.67	−1.30	1.14	−1.71	4.82	+1.76	38.69	−2.00
Powellton	3.76	+0.08	2.27	−0.74	5.39	+0.76	4.29	+0.47	2.33	−1.73	1.75	−3.12	6.23	+1.59	6.16	+2.58	3.05	+0.24	3.74	+1.71			3.35	+0.43		
Princeton	4.35	−1.02	4.60	+0.51	5.85	−0.51	3.40	−2.50	1.45	−4.06	3.25	−4.21														
Robertsburg	2.14	−1.43	4.05	−0.91	2.50	−1.72	4.64	+0.61	2.64	−0.91	1.23	−2.76	1.66	−2.47	2.91	−0.50	1.23	−1.13	3.77	+1.33	1.14	−1.23	5.65	+2.28	33.56	−8.84
Ryan	2.94	−0.91	3.65	+0.41	2.48	−1.91	5.14	+1.16	2.82	−0.76	1.44	−3.06	3.21	−1.72	5.76	+1.78	1.16	−1.33	3.95	+0.91	1.07	−1.26	5.49	+2.20	39.11	−4.49
Spencer	4.28	+0.23	4.74	+1.72	3.56	−0.11	3.75	+0.26	2.45	−1.28	1.78	−2.66	4.68	+0.12	4.80	+1.52	2.00	−1.38	4.03	+1.24	1.73	−0.61	6.51	+3.46	44.31	+2.51
Sutton	2.47	−2.85	2.75	−0.45	1.45	−1.77	2.10	−2.68	1.24	−3.19	4.00	−1.93	5.58	+0.77	4.54	+0.73	2.00	−1.20	3.28	+0.37	1.40	−1.67	5.20	+1.47	36.01	−12.40
Union	2.00	−1.91	3.00	+0.69	2.08	−1.97	2.27	−1.06	1.40	−1.25	0.97	−3.30	5.58	+1.32	2.51	−1.12	1.26	−1.31	3.06	+0.30	1.61	−0.47	4.12	+1.64	29.86	−8.44
Williamson	2.70	−1.03	2.98	−0.25	4.66	+0.11	4.06	−0.22	1.54	−2.54	0.80	−4.33	5.76	+1.22	4.52	+1.14	2.18	−0.72	2.04	−0.42	0.94	−1.83	5.64	+1.95	37.82	−6.92

CHART SHOWING LOCATION OF OBSERVATION AND FORECAST DISPLAY STATIONS



TOTAL ANNUAL PRECIPITATION [14]



SCALE OF SHADES Inches

Less than 30 | 30 to 40. | 40 to 50 | More than 50

COOPERATIVE STATIONS AND OBSERVERS

Station.	Observer.
Bancroft	R. E. Dent
Bayard	Solomon Clark
Beckley	John A. Ewart
Bens Run	J. D. Riggs
Bluefield	Norfolk & Western Railway Co.
Brandonville	W. T. Miller
Buchannon	H. A. Darnall
Burlington	J. W. Vandiver
Cairo	Van. A. Zevely
Central Station	G. W. Sherwood
Charleston	R. C. Hewes
Clay	Prof. E. H. Knabenshue
Cortland	Samuel Harmon
Cheatbridge	Franz A. Degler
Creston	*J. M. Reed
Cuba	C. T. Perry
Davis	Ross C. Male
Dunlow	L. A. Smith
Elizabeth	E. D. Ball
Elkhorn	J. J. Lincoln
Elkins	U. S. Weather Bureau
Fairmont	*F. P. Hall
Franklin	Miss Evelyn Calhoun
Glenville	*M. T. Brannon
Grafton	Joseph Gerken
Green Sulphur Springs	Arthur George
Harpers Ferry	*S W. Lightner
Hinton	*J. B. Lavender
Holcomb	R. C. Ferguson
Huntington	*L. H. Hutchinson
Lewisburg	George T. Argabrite
Logan	Dr. J. E. McDonald
Lost City	B. D. Hinegardner
Lost Creek	Allen Smith
Madison	S. E. Bradley
Mannington	Jas. A. Morgan
Marlinton	C. J. McCarty
Martinsburg	G. W. Van Metre
Moorefield	J. C. Fisher
Morgantown	Prof. Edgar L. Andrews
Moundsville	M. Z. White
New Cumberland	Frank S. Evans
New Martinsville	Wm. Ankron
Nuttallburg	Miss Donna Tully
Osceola	A. T. Dohmer
Parkersburg	U. S. Weather Bureau
Parsons	J. W. Swisher
Philippi	J. D. Dadisman
Pickens	Dr. J. L. Cunningham
Point Pleasant	*W. D. Holmes
Powellton	F. L. Evans
Princeton	H. Scott
Robertsburg	E. C. Brace, Jr.
Romney	Geo. E. Arnold
Rowlesburg	*F. R. Proudfoot
Ryan	W. E. Ryan
Saint Marys	*J. O. Goodman
Smithfield	G. M. Whisler
Spencer	A. M. McKown
Sutton	Ben Gillesppie
Terra Alta	H. C. Shaffer
Union	Shelton Clark
Upper Tract	J. M. Mallow
Webster Springs	D. H. Hamrick
Wellsburg	C. P. Waugh
Weston	Miss C. M. Davis
Wheeling	*Miss M. B. Forsyth
Williamson	*J. F. Keyser

* River Observer.

FORECAST DISTRIBUTORS AND DISPLAYMEN

[By Cards, Maps and Flags]

Station.	Distributor.
Bluefield—4	Norfolk & Western Railway Co.
Buckhannon*	Postmaster
Charleston—65*	Postmaster
Elkins—289†	Local Office, U. S. Weather Bureau
Grafton—62	Postmaster
Hinton—25	J. B. Lavender
Morgantown—26	Postmaster
Parkersburg—623	Section Center
Point Pleasant—38	W. D. Holmes
Ripley*	B. R. Parsons
Weston—30	Postmaster

Figures represent number of places supplied with forecast cards.

* Flag display station. † Forecast cards and maps.

TELEPHONE SERVICE

Station.	Disseminator.
Alpena	Consolidated Tel. Co.
Arnoldsburg	Citizens Rural Tel. Co.
Barboursville	Barboursville Tel. Co.
Beckley	Chesapeake & Potomac Tel. Co.
Belington	Consolidated Tel, Co.
Belington	Chesapeake & Potomac Tel. Co.
Bens Run	Central District Tel. Co.
Beverly	Chesapeake & Potomac Tel. Co.
Beverly	Consolidated Tel. Co.
Brooksville	Central District Tel. Co.
Buckhannon	Chesapeake & Potomac Tel. Co.
Buckhannon	Consolidated Tel. Co.
Bluefield	Bluefield Tel. Co.
Burning Springs	Central District Tel. Co.
Burning Springs	Citizens Rural Tel. Co.
Cairo	Citizens Rural Tel. Co.
Charleston	Chesapeake & Potomac Tel. Co.
Clarksburg	Central District Tel. Co.
Clay Court House	Citizens Rural Tel. Co.
Clendenin	Citizens Rural Tal. Co.
Coalton	Chesapeake & Potomac Tel. Co.
Cottageville	Citizens Rural Tel. Co.
Cox Landing	Union Ridge & Ohio River Tel. Co.
Creston	Citizens Rural Tel. Co.
Creston	Central District Tel. Co.
Davis	Consolidated Tel. Co.
Durbin	Consolidated Tel. Co.
Elizabeth	Central District Tel. Co.
Elizabeth	Citizens Rural Tel. Co.
Elkins	Consolidated Tel. Co.
Elkins	Chesapeake & Potomac Tel. Co.
Evenwood	Chesapeake & Potomac Tel. Co.
Fairmont	Central District Tel. Co.
Fairmont	Consolidated Tel. Co.
Fayetteville	Chesapeake & Potomac Tel. Co.
Friendly	Central District Tel. Co.
Glenville	Citizens Rural Tel. Co.
Glenwood	Glenwood Tel. Co.
Grafton	Consolidated Tel. Co.
Grafton	Central District Tel. Co.
Grantsville	Citizens Rural Tel. Co.
Harley	Citizens Rural Tel. Co.
Harman	Consolidated Tel. Co.
Hinton	Chesapeake & Potomac Tel. Co.
Huntington	Chesapeake & Potomac Tel. Co.
Hur	Citizens Rural Tel. Co.
Huttonsville	Beverly & Marlinton Tel. Co.
Huttonsville	Consolidated Tel. Co.
Long Reach	Central District Tel. Co.
Logan	Chesapeake & Potomac Tel. Co.
Lough	Citizens Rural Tel. Co.
Maclarlan	Citizens Rural Tel. Co.
Madison	Chesapeaeke & Potomac Tel. Co.
Mason City	Chesapeake & Potomac Tel. Co.
Middlebourne	Central District Tel. Co.
Mill Creek	Chesapeake & Potomac Tel. Co.
Milton	Milton Tel. System
Montgomery	Chesapeake & Potomac Tel. Co.
Montrose	Chesapeake & Potomac Tel. Co.
Morgantown	National Tel. Co.
Murphytown	Citizens Rural Tel. Co.
New Martinsville	Central District Tel. Co.
New Martinsville	Enterprise Tel. Co.
Oak Hill	Chesapeake & Potomac Tei. Co.
Palestine	Citizens Rural Tel. Co.
Park	Central District Tel. Co.
Parkersburg	Central District Tel. Co.
Parkersburg	Citizens Rural Tel. Co.
Parsons	Chesapeake & Potomac Tel. Co.
Parsons	Consolidated Tel. Co.
Paw Paw	Martinsburg & Cumberland Tel. Co.
Petroleum	Citizens Rural Tel. Co.
Philippi	Consolidated Tel. Co.
Philippi	Chesapeake & Potomac Tel. Co.
Point Pleasant	Chesapeake & Potomac Tel. Co.
Ravenswood	Chesapeake & Potomac Tel. Co.
Ravenswood	Ravenswood Tel. Co.
Ravenswood	Citizens Rural Tel. Co.
Reedy	Citizens Rural Tel. Co.
Revere	Citizens Rural Tel. Co.
Richwood	Chesapeake & Potomac Tel. Co.
Ripley	Citizens Rural Tel. Co.
Ripley	Arbuckle & Ripley Tel. Co.
Rock Cave	Consolidated Tel. Co.
Round Rock	Central District Tel. Co.
Rowlesburg	Rowlesburg Tel. Co.
Saint Albans	Chesapeake & Potomac Tel. Co.
Saint Marys	Central District Tel. Co.
Saint Marys	Citizens Rural Tel. Co.
Sandyville	Citizens Rural Tel. Co.
Sistersville	Central District Tel. Co.
Spencer	Citizens Rural Tel. Co.
Spencer	Chesapeake & Potomac Tel. Co.
Slate	Citizens Rural Tel. Co.
Sutton	Chesapeake & Potomac Tel. Co.
Tanner	Citizens Rural Tel. Co.
Thomas	Consolidated Tel. Co.
Thomas	Chesapeake & Potomac Tel. Co.
Topins Grove	Citizens Rural Tel. Co.
Thurmond	Chesapeake & Potomac Tel. Co.
Wadesville	Citizens Rural Tel. Co.
Walker	Citizens Rural Tel. Co.
Walton	Citizens Rural Tel. Co.
Waverly	Citizens Rural Tel. Co.
West Fork	Central District Tel. Co.
Westen	Chesapeake & Potomac Tel. Co.
Wheeling	National Tel. Co.

Stack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

OF THE
UNIVERSITY OF ILLINOIS
17 MAR 1915

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JANUARY, 1915

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MARCH 11, 1915

Departure of the Mean Temperature from the Normal, January, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIII. PARKERSBURG, W. VA., JANUARY, 1915. NO. 1.

GENERAL SUMMARY.

January was exceptionally wet and slightly colder than usual, with practically a normal snowfall, and the precipitation was well distributed over the State and throughout the month. The temperatures were exceptionally uniform. Readings below zero occurred at only seven stations, and higher January temperatures occurred in 20 of the past 24 years of record and lower January readings in 11 years of the same period. As the cold wave of the 29th lost much energy before reaching the interior of the State, a reading below zero was not recorded in the mountain or eastern sections, the lowest temperatures occurring in the northwest counties and in Greenbrier county. In most sections the ground was protected by snow during the cold periods of the month. The rivers were at moderate stages from 10th to the 24th.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.11 and 30.13 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.56 inches on the 3d, and 29.33 inches on the 18th. Elkins, 30.53 inches on the 3d, and 29.34 inches on the 18th.

TEMPERATURE.

The monthly mean for the State, 53 stations reporting, was 31.7°. The mean departure from the normal for 44 stations having ten or more years of record was minus 1°. The month opened cold, but the temperatures were above the normal from the 4th to the 20th, with the highest readings of the month on the 5-6th and 16-17th Cold weather prevailed from the 20th to the 31st, except on the 22-23d in the western counties and from the 23d to the 27th in the central and eastern counties, when the averages were about normal, with the lowest temperatures occurring in most sections on the 22d and 29th. In the southeast counties, however, the coldest weather occurred on the 1st. Much warmer weather set in on the 31st.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 84 per cent; 8 p. m., 76 per cent. The January averages for the same hours for the past 26 years are 84 and 78 per cent, respectively. Elkins, 8 a. m., 87 per cent; 8 p. m., 80 per cent. The January averages for Elkins for the same hours for the past 14 years are 84 and 84 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 58 stations reporting, was 4.85 inches. The departure from the normal for 49 stations having ten or more years of record was plus 1.01 inches. Precipitation was general on the 6-7th, 11-12th, 14-15th, 28th, and 30th-31st, the amounts being heavy on the 6-7th, 12th, 18th, and 31st. In many sections about one-half of the heavy precipitation on the 11-12th was snow, and light to moderate snowstorms prevailed from the 19th to the 25th and on the 28th and 30th-31st.

WIND.

The average wind velocity at Parkersburg was 5.8 miles per hour, or 1.0 mile below the January average for the past 25 years. The average at Elkins was 4.3 miles per hour, or 0.7 of a mile below the January average for 15 years. The highest velocity at Parkersburg was 28 miles per hour from the northwest on the 2d, and at Elkins 26 miles per hour from the west on the 18th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 34 per cent of the possible amount, or 7 per cent below the January average for 17 years. The average at Elkins was 24 per cent, or 4 per cent below the January average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 16th and 29th; Bayard, 12th; Burlington, 18th; Davis, 13th and 14th; Elkins, 14th, 15th, and 16th; Fairmont, 5th, 9th, and 10th; Grafton, 6th, 7th, and 27th; Green Sulphur Springs, 6th; Huntington, 9th; Marlinton, 14th; New Cumberland, 10th; Parkersburg, 26th; Philippi, 13th and 22d; Pickens, 19th and 26th; Romney, 6th, 12th, 15th, and 31st; Rowelesburg, 9th; Wheeling, 1st, 5th, 11th, 16th, and 30th.

Sleet: Bayard, 25th and 31st; Charleston, 24th; Creston, 25th; Elkins, 23d and 24th; Evans, 23d and 24th; Green Sulphur Springs, 24th; Lewisburg, 24th; Lost City, 12th, 24th, and 31st; Marlinton, 6th, 12th, 23d, and 31st; Nuttallburg, 13th, 23d, and 24th; Parkersburg, 25th; Pickens, 13th; Powellton, 24th; Romney, 15th, 17th, 24th 25th, and 31st; Ryan, 24th and 25th: Union, 11th, 24th, and 31st; Terra Alta, 25th.

Halo, solar: Wellsburg, 16th and 26th.

Thunderstorms: Bayard, 19th; Philippi, 17th, and Romney, 16th.

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in inches.
1891	31.7	..	....	3.64	....
1892	29.4	76	− 3	3.15	....
1893	22.6	71	−25	2.49	....
1894	36.6	70	− 8	2.41	....
1895	25.0	69	−21	4.48	....
1896	32.4	72	− 6	1.57	....
1897	28.8	69	−18	1.70	....
1898	37.1	75	− 5	5.10	....
1899	32.1	70	−21	4.05	7.5
1900	34.5	74	−10	2.24	1.9
1901	33.6	69	− 4	2.41	7.3
1902	30.2	64	− 1	3.65	9.8
1903	31.8	79	− 7	3.21	8.6
1904	27.5	72	−18	2.72	10.8
1905	26.4	70	−14	3.15	22.0
1906	38.2	80	− 5	3.79	5.1
1907	38.7	76	−15	6.41	5.6
1908	31.0	62	−16	2.92	12.8
1909	36.8	76	− 5	3.41	8.7
1910	32.0	67	− 5	5.68	15.4
1911	37.3	71	− 5	5.86	7.0
1912	23.5	66	−34	2.60	13.6
1913	40.7	74	9	6.23	5.7
1914	35.8	83	−11	3.18	15.6
1915	31.7	68	− 8	4.85	10.4
Entire period	32.2	83	−34	3.64	9.9

Climatological Data for January, 1915.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	28.4	−0.2	62	7	3	14	39	5.20	−0.06	1.49	20.0	15	10	2	19	w.	Solomon Clark
Burlington	Mineral	875	20	29.6	−1.4	49	7	8	1	28	2.00	−0.63	0.95	13.0	7	3	18	10	nw.	J. W. Vandiver
Franklin	Pendleton	641	8	29.2	.....	46	4	12	1	29	.....	.....	.....	.....	....	10	10	11	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	5.26	+2.49	1.38	.....	7	.....	.....	.....	.....	S. W. Lightner
Lost City	Hardy	.....	8	31.4	.....	52	18	10	29	21	4.14	.....	1.25	6.0	7	10	9	12	w.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	31.9	+1.2	51	7†	14	30	32	4.96	+2.53	.....	5.0	9	16	3	12	w.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	30.2	−2.2	56	17	14	29	20	2.52	−0.02	0.70	13.0	7	6	17	8	nw.	John C. Fisher
Romney	Hampshire	824	17	32.2	+0.8	58	23	8	1	32	4.04	+1.35	1.11	2.0	.....	.....	.....	.....	.....	Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	31.0	−1.4	51	17	7	3	33	3.61	+1.04	1.60	10.0	7	12	8	11	w.	J. M. Mallow
Averages and	Extremes	.....	....	30.5	−0.5	62	7	3	14	39	3.97	+0.96	1.60	9.9	8	9	10	12	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	31.4	−1.0	60	17	2	29	32	5.81	+1.52	0.90	20.0	15	8	12	11	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	4.58	.....	1.40	13.0	8	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	32.2	+0.1	61	17	5	22†	37	6.38	+2.26	1.71	6.5	15	11	3	17	.....	H. A. Darnall
Cairo	Ritchie	674	12	32.7	−1.9	60	17	− 1	29	37	4.20	−0.08	0.90	7.0	13	7	8	16	w.	Van A. Zevely
Central Station	Doddridge	950	12	31.2	−0.8	60	16 †	0	29	37	4.35	+0.85	0.81	4.8	15	4	8	19	w.	G. W. Sherwood
Cheat Bridge	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	6.45	.....	2.00	.....	12	.....	.....	.....	.....	Franz A. Degler
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	4.32	.....	1.07	17.0	8	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	34.8	+0.9	68	16	1	29	43	4.57	+1.07	0.90	5.0	15	6	2	23	sw.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	6.08	.....	1.05	25.5	17	8	4	19	sw.	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	5.22	.....	0.87	.....	13	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	31.8	+2.9	59	18	9	22	38	5.14	+1.80	1.45	13.2	18	3	7	21	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	31.0	−3.6	60	17	8	29	34	5.41	+1.59	1.52	5.5	16	12	0	19	w.	F. P. Hall
Glenville	Gilmer	738	25	33.6	+0.5	64	17	5	29	35	4.80	+0.61	1.25	7.0	12	10	0	21	s.	M. T. Brannon
Grafton	Taylor	1,000	22	33.6	+1.2	61	17 †	9	29	37	6.11	+2.01	1.86	6.0	14	11	3	17	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	33.0	0.0	62	17	5	29	39	5.32	+1.48	1.90	3.0	12	9	4	18	w.	Allen Smith
Mannington	Marion	974	12	32.1	+0.6	62	17	3	29	36	5.30	+0.58	1.38	10.7	18	5	6	20	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	32.1[a]	−0.2	60	17	6 [a]	29	26[a]	3.65	−0.31	1.15	7.0	9	3	6	22	.....	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	29.3[a]	.....	60 [a]	16 †	− 2 [a]	29	39[a]	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Z. White
New Cumberland	Hancock	987	15	27.8	−0.9	52	17	− 8	30	34	3.50	+0.88	0.50	3.5	9	8	4	19	n.	Frank S. Evans
New Martinsville	Wetzel	634	21	32.8	−0.2	62	16	1	29	35	4.96	+1.35	0.85	6.7	12	10	4	17	s.	Wm. Ankrom
Osceola	Randolph	3,600	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. T. Dohmer
Parkersburg	Wood	638	26	31.9	+0.6	60	17	2	29	29	3.68	+0.49	0.67	8.0	15	5	7	19	se.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	31.8	+0.1	60	19	2	29	36	5.54	+0.66	1.25	19.2	16	7	4	20	.....	J. W. Swisher
Philippi	Barbour	1,149	22	32.6	+1.8	59	17	6	29	33	6.18	+2.08	1.40	12.6	17	10	8	13	nw.	J. D. Dadisman
Pickens	Randolph	2,697	24	31.5	0.0	60	5	0	22	36	11.38	+5.09	2.20	36.0	18	7	6	18	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	5.22	+0.96	1.36	19.0	18	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	4.42	.....	0.85	.....	10	.....	.....	.....	.....	J. O. Goodman
Smithfield	Wetzel	835	10	34.7	.....	60	16	1	29	44	4.73	−0.68	1.20	12.0	15	11	9	11	nw.	G. M. Whisler
Terra Alta	Preston	2,612	14	27.4	−0.9	54	16	0	3	32	6.88	+1.49	2.00	35.0	15	.....	.....	.....	.....	H. C. Shaffer
Wellsburg	Brooke	1,225	20	28.2	−1.3	53	17	0	29	26	4.08	+0.63	0.60	11.2	14	7	7	17	w.	C. P. Waugh
Weston[d]	Lewis	1,026	26	33.4	−0.6	64	15	10	22	38	2.78	−1.45	0.62	9.0	19	7	3	17	.....	Miss C. M. Davis
Wheeling	Ohio	645	30	29.7	.....	59	17	− 1	29	38	4.59	+1.54	1.00	8.4	19	11	2	18	w.	Miss M. B. Forsyth
Averages and	Extremes	.....	....	31.7	−0.1	68	16	− 8	30	44	5.19	+1.10	2.20	12.3	14	8	5	18	w.	
Southern Section.																				
Bancroft	Putnam	574	11	31.5	−4.1	62	16†	6	29	38	5.00	+0.97	1.05	4.5	13	10	5	16	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	33.7	+0.5	68	16	8	22	48	5.60	+1.86	1.71	7.0	7	9	0	22	w.	John A. Ewart
Bluefield	Mercer	2,558	20	33.2[g]	−1.2	59 [g]	19	8 [g]	22	34[g]	2.17	−0.95	0.75	7.5	9	12[b]	2[b]	15[b]	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	36.0	−3.3	64	17	10	29	34	5.28	+1.29	1.10	3.0	18	7	7	17	w.	R. C. Hewes
Clay	*	706	0	32.8[a]	.....	63 [a]	17	8	29	38[a]	4.86	.....	2.00	5.2	13	8[a]	1[a]	21[a]	.....	Prof. E. H. Knabenshue
Cuba	* Jackson	650	14	32.3	−1.5	63	16	1	29	37	3.68	+0.16	0.87	3.2	13	6	11	14	ne.	C. T. Perry
Dunlow	Wayne	717	7	30.5	.....	65	17	16	22	37	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	37.2	+0.3	63	31	10	22	28	3.99	+0.87	0.77	5.1	11	10	8	13	w.	J. J. Lincoln
Evans	Jackson	606	0	.....	.....	.....	.....	.....	.....	.....	5.14	.....	0.82	.....	16	5	4	22	.....	B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	31.8	−1.3	59	19	− 3	1	43	3.24	+0.33	1.00	10.0	11	10	0	21	n.	Arthur George
Hinton	do	1,450	25	31.6[a]	−3.4	55 [a]	16	14	1†	30[a]	4.46	+1.51	1.34	8.5	15	8	1	22	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	30.6	.....	58	18	0	22	44	6.28	.....	1.33	20.0	13	10	0	21	.....	R. E. Ferguson
Huntington	Cabell	538	19	32.6	−4.0	60	17	8	29	36	4.52	+0.88	0.90	3.7	13	9	0	22	.....	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	30.2	−2.2	58	18	4	1	28	4.44	+1.03	0.95	9.5	11	7	4	20	nw.	Geo. T. Argabrite
Logan	Logan	687	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. J. E. McDonald
Madison	Boone	704	9	32.0[b]	.....	64 [b]	17	9 [g]	29	36[g]	6.73	.....	1.80	15.0	15	6[c]	5[g]	13[g]	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	26.3	−2.9	46	19	0	1	36	7.42	+3.97	1.80	19.0	13	6	12	13	nw.	S. L. Brown
Nuttallburg	[c] Fayette	2,252	22	28.8	−3.2	55	17	10	22†	25	3.25	+0.67	0.70	19.0	....	8	7	13	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	32.4	−1.7	61	16	5	29	37	4.30	+0.67	0.74	2.0	13	10	1	20	sw.	W. D. Holmes
Powellton	Fayette	933	17	36.0[g]	−0.7	64 [g]	17	12 [c]	29	30[g]	4.29	+0.46	1.53	4.0	....	10[c]	1[c]	17[c]	.....	Morris Hansford
Robertsburg	Putnam	574	14	31.2	−3.4	61	5	3	29	51	4.84	+1.05	0.96	2.0	13	8	1	22	.....	E. C. Brace
Ryan	Roane	700	11	32.8	−2.2	61	16	− 1	29	39	4.87	+1.02	0.76	5.7	17	8	4	19	.....	Wm. E. Ryan
Spencer	do	784	16	32.6	.....	64	16	− 1	29	42	3.97	−0.22	0.96	2.7	10	1	14	16	.....	A. M. McKown
Sutton	Braxton	839	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ben Gillespie
Union	Monroe	2,250	10	31.0	−2.2	60	18	6	1	35	3.84	+0.14	0.87	6.0	10	.....	.....	.....	.....	Shelton Clark
Williamson	Mingo	660	13	32.0	−4.5	61	16	15	22†	36	5.38	+1.47	1.72	2.2	17	11	4	16	w.	J. F. Keyser
Averages and	Extremes	.....	.....	32.1	−2.3	68	16	3	1	51	4.71	+0.91	1.80	7.8	13	9	4	18	w.	
State Averages and	Extremes	.....	.....	31.7	−1.0	68	16	− 8	30	51	4.85	+1.01	2.20	10.3	13	8	6	17	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for January, 1915.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac	T.		T.		.33	.75					1.49	.30		.05		.05	.35	.30	.10	.15	.05	.23	T.	.20		T.	.10	T.		.75	5.20
Burlington	do					*	.20				*	.95							.30			.25									.30	2.00
Franklin	do																																
Harpers Ferry	do					.33	.95					1.30	1.38					T.	.80						40						.10	5.26
Lost City	do					1.25					T.	1.10						.25	.71	.23	T.		T.		T.			.10			.50	4.14
Martinsburg	do		T.			1.50					*	1.82			.06			.83				.15	.25	.05			T.			.30	4.96
Moorefield	do						.70						.60					.27	.25	T.	T.		.20	T.	T.				.20		.30	2.52
Romney	do					.30	1.11					.65	.55		*			.18	.50	.55					*	*				20	*	4.04
Upper Tract	do					.20	.76				T.	1.60						.18	.12	T.				.50							.25	3.61
Northern Section.																																	
Bens Run	Ohio					.72	.15					.90			.20			.05	.50	.50	.30	.20	.26	.28	.20	.70			.10			.75	5.81
Brandonville	Monongahela					.11	1.40					.80						.28	.29	.20					.50	1.00							4.58
Buckhannon	do		T.			.50	.60				.10	1.71	.20		.42			T.	.50	.10	.05	.25		.35			.50	.05	.05	T.	1.00	6.38
Cairo	Little Kanawha					.67	.07					.90	.14		.17			.05	.63	.22	.15	.20	.10								.15	.75	4.20
Central Station	Middle Is. Creek		T.		T.		.81	.57				T.	.69	.09		.06		T.	.37	.19	.07	.06	.16	.28	.02	.35	T.		.03	T.		.60	4.35
Cheat Bridge	Monongahela						.28	1.50	.40				2.00	.70				.24	.10	T.	.18	.10	.15	.40	T.	T.			T.	T.		.40	6.45
Cortland	do						.37	.80					1.00		.20			.30	1.07		.28											.30	4.32
Creston	Little Kanawha						.15	.90					.90	.20		.06		.03	.50	.30	.10	.10	T.	.22	.14	.45	T.		.10	T.		.42	4.57
Davis	Monongahela	.10	.10	T.	T.		.47	1.05					.78	.50		T.		.84	.31	.35	.10	.55		.32	.13	.18			T.	.15	.05	.10	6.08
Elizabeth	Little Kanawha						.10	.54					.83			.30			.73	.23	.10	.06		.56	.17	.87				.06		.67	5.22
Elkins ***	Monongahela		T.			T.	1.00	.06				.65	1.10	.08	.07	.01		.22	.42	.02	.04	T.	.05	.09	.08	.09		T.	.02	T.	.03	1.11	5.14
Fairmont	do	T.	T.	T.	.01		.10	1.45					1.52	.15		.12		.05	.32	.18	.02	.06	.03	.46	.14	.45	T.		T.	T.	T.	.35	5.41
Glenville	Little Kanawha						.60	.58					1.25	.20					.56	T.		.10	.14	T.	.10	.45	T.		.15	.10		.57	4.80
Grafton	Monongahela						.60	.80				.06	1.86			.31			.45	.13	.05	.10	.10	.14	.10	1.01						.40	6.11
Lost Creek	do						.65	.58				T.	1.90	T.		.19		T.	.27	T.	.04	.03	.09	.22	.05	.50			T.	T.		.80	5.32
Mannington	do					.01		.01				T.	1.28	.12		.07		.02	.47	.17	.17	.06	.22	.22	.02	.15			.01			.79	5.30
Morgantown *	do		.05				.66						1.15	.08					.38	T.	T.	.10	.44	.19								.60	3.65
Moundsville	Ohio																																
New Cumberland	do		T.				.40	.30				T.	.50	T.		T.		T.	.50	.40	T.	T.	.10	.40		.40			T.			.50	3.50
New Martinsville	do						.85	.55								.10			.50	.60	.10	.09	.34	.34	.14	.60						.75	4.96
Osceola	Monongahela																																
Parkersburg ***	Ohio		T.		T.	T.	.55					.45	.16		.19		T.	.01	.51	T.	.11	.05	.41	.27	.16	.21			.01		.09	.50	3.68
Parsons	Monongahela		T.				1.25					.10	.75	.40		.20		.35	.25	.28	.20	.20	.30	.05	.26	.30			.15			.50	5.54
Philippi	do		T.		.02		.80	.30				.08	1.40	.18		.35		T.	.30	.25	.15	.20	.50	.18	.06	.05		.10	T.			1.26	6.18
Pickens	do		T.				1.06	.29				*	*	2.38	*	1.66			.70	.61	.60	.80	.10	.25		T.		.30	.20	.10	.13	2.20	11.38
Rowlesburg	do				.02		.16	1.26					1.36	.34		.16		.04	.30	.30	.02	.08	.10	.34	.10	.24			.08	.02		.30	5.22
Saint Marys	Ohio			T.			.10	.65				.85				.05			.07	.70	.10			.75		.65						.50	4.42
Smithfield	Fishing Creek						.08	.67	.05				.69	.12				.17	.33	.31	.10	.30	.10	1.20		.22			.12			.27	4.73
Terra Alta	Monongahela					2.00		1.00			.60	.80	.20					.10	.20	.20	.30	.40	.04		T.		.30		.20	.30	.24	6.88
Wellsburg	Ohio		.05				.44	.25			.02	.56	.20					.14	.50	T.	.30		.30	.50		.20			.02			.60	4.08
Weston	Monongahela		.04				.16	.40			.10	.18	.10		.08	.52	.10	*	*	.10	.06	.06	.14	.10	.16			.06	T.	T.	.42	2.78
Wheeling	Ohio	T.	.01	.01			.02	1.00	T.			.55	.20	.03	.02			.04	.30	.52	.01	.05	.11	.80	.12	.58	T.			.05		.17	4.59
Southern Section.																																	
Bancroft	Great Kanawha					.05	.72					.95	.27					.05	.55	.23	.05	.10		.33		1.05			.10			.55	5.00
Beckley	do	1.53			.88						.60	1.71										.10	T.		T.					.40	.38	5.60
Bluefield	do					.75					.10	.30						.05		.25	.10		.32		.20			.10			T.	2.17
Charleston	do					.12	.58					1.10	.36		.10		.04	.66	.26	.06	.06	.02	.16	.14	.84	.02		.08	.02	T.	.66	5.28
Clay	do					.20	.77					2.00	.15		.27			.60	.15	.05		.25	.05					.18			.09	4.86
Cuba	Sand Creek		T.			.50	.05				.18	.69		T.	.22		.04	.44	.25	.05	.02	.10	.50	T.	T			T.			T.	3.68
Dunlow	Big Sandy																																
Elkhorn	do					.63	.27				.77	.10		.63				.09	.12		.27	.37			.10						.64	3.99
Evans						.60	.12				.17	.82	.10		.13		.06	.56	.30	.07	.01	.16	.51	.14	.71			T.		T.	.68	5.14
Green Sulphur Spgs.	Great Kanawha					1.00	.55				.40	.10			.15	.18		.16	.20	.10					*	T.	T.	T.			.40	3.24
Hinton	do					.38	.80					1.34	.04		.06		.20	.12	.06	.06	.04	T.	.02	.28	.38			.08	T.	T.	.60	4.46
Holcomb	do					*	1.00				*	1.77		*	.18				.63	*	*	.80						.40		*	1.50	6.28
Huntington	Ohio					.08	.46					.90	.20		.12			.54	.10	.06	T.		.52	.20	.64			.06	T.		.64	4.52
Lewisburg	Great Kanawha					.95	.55				.30	.51		.13				.33	.21	T.	.15	T.		.22	.59			T.		T.	.50	4.44
Logan	Guyandotte																																
Madison	Great Kanawha		T.				T.					1.80	.50	.12	.30		.08	1.00	.15	.30			.30	.10	.30		.20		.20	.10	1.28	6.73
Marlinton	do		T.			1.80	.82				.65	1.10	T.		.10		.40	.90	T.	.10	.05	.05	.45	.15				T.		T.	.85	7.42
Nuttallburg	do					.70					.15		*					.30		.30	.40	.25	*	*				.15	.20	.40	.40	3.25
Point Pleasant	Ohio					.06	.62					.72	.16		.10			.40	.34	.08	.02		.40	.26	.74						.40	4.30
Powellton	Great Kanawha				*	*	.94				.52	T.				1.53				T.	*	*	.25	T.	.15			.15			.75	4.29
Robertsburg	do				.16	.68						.90	.15		.1			.45	.38	.10	.05		.45		.40			.05			.96	4.84
Ryan	do				.68	.20					.19	.70		.06				.03	.61	.24	.05	.05	.20	.26	.10	.59			.10	T.	.01	.74	4.87
Spencer	Little Kanawha							.72					.90	.13	T.	.18		T.	.54	.10		.05				.46			.12			.71	3.97
Sutton	Great Kanawha																																
Union	do					.35	.82					.20	.70		.40			.87	T.		.10			.10		.10				T.		.20	3.84
Williamson	Big Sandy					.12	.54					1.72	.36		.10				.66	.20	.05	.06	.02	.02	.25	.56	.06		.10	.02		.54	5.38

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount the unrecorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

Daily Temperatures for January, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	33	33	29	37	47	49	62	35	30	43	41	39	30	42	41	46	51	50	55	29	28	25	44	32	37	34	34	32	22	37	36	38.2
	Minimum	8	21	10	20	10	25	30	25	18	14	19	26	26	3	25	7	30	34	25	15	15	6	24	16	17	13	25	22	16	10	20	18.5
Burlington	Maximum	32	40	30	33	37	33	49	43	40	43	37	39	40	38	47	43	42	40	46	37	33	37	47	32	38	37	36	34	31	32	36	38.1
	Minimum	8	20	12	20	11	22	33	27	24	15	23	29	22	12	24	17	29	34	32	22	23	22	25	21	21	17	27	25	11	12	18	21.2
Lost City	Maximum	32	36	28	38	38	42	44	39	36	38	36	32	38	44	42	42	49	52	41	34	33	28	42	36	42	34	36	36	30	32	36	37.6
	Minimum	12	24	14	24	20	31	35	32	28	18	25	31	32	23	33	22	42	41	32	25	22	14	28	22	22	22	34	24	10	14	25	25.2
Martinsburg§	Maximum	32	39	30	32	39	49	51	44	41	40	38	41	45	44	50	43	44	51	39	39	32	37	51	30	40	37	37	36	33	30	33	39.6
	Minimum	15	15	19	19	17	17	32	35	28	21	21	28	34	26	26	27	30	37	37	27	21	23	23	25	25	24	24	31	15	14	15	24.2
Moorefield	Maximum	24	36	38	32	38	34	32	36	36	35	32	34	36	34	36	44	56	46	42	36	32	28	44	28	34	36	34	32	28	32	30	35.3
	Minimum	20	24	26	20	32	28	30	22	20	18	16	28	24	22	16	30	44	34	36	26	28	20	28	22	26	28	30	26	14	18	26	25.2
Romney	Maximum	35	42	32	32	38	40	52	46	44	48	44	42	40	40	45	47	45	44	47	38	35	31	58	39	39	40	37	36	34	35	33	40.6
	Minimum	8	21	15	20	12	32	34	32	35	16	24	30	33	15	33	20	35	35	33	23	23	20	26	23	22	20	29	20	10	14	24	23.8
Upper Tract	Maximum	28	39	32	41	47	44	49	46	42	44	46	35	..	36	36	48	51	50	49	38	35	29	38	49	45	36	35	34	34	33	37	40.5
	Minimum	9	26	7	20	14	28	32	33	29	18	20	27	..	26	28	18	19	36	30	25	21	14	18	20	20	18	27	26	15	11	11	21.5
Northern Section.																																	
Bens Run	Maximum	41	40	34	44	51	52	51	42	38	48	40	39	35	54	47	59	60	47	37	34	27	29	42	29	34	32	31	29	23	32	41	40.1
	Minimum	14	27	14	24	21	32	33	28	22	19	28	23	31	29	32	27	47	35	29	21	21	15	19	9	22	12	16	16	2	8	30	22.8
Buckhannon	Maximum	38	38	40	40	50	50	50	40	33	43	48	40	35	47	46	44	61	58	46	33	28	42	40	38	40	42	36	30	25	35	52	41.5
	Minimum	13	22	12	26	18	31	30	26	23	17	25	31	29	19	35	24	36	36	27	28	18	5	25	11	21	25	25	25	5	12	31	22.9
Central Station	Maximum	41	39	30	43	53	53	52	43	39	35	48	40	35	50	50	60	60	50	39	34	30	33	42	27	34	34	36	30	24	35	44	40.7
	Minimum	10	25	9	22	17	29	33	25	18	15	24	31	29	24	36	23	41	33	28	23	20	10	23	12	25	10	27	19	0	3	29	21.7
Creston	Maximum	52	40	37	41	60	54	54	55	54	55	49	40	35	62	55	68	59	50	41	37	31	37	44	29	34	47	40	33	41	40	46	45.8
	Minimum	13	27	13	24	18	30	35	24	20	16	26	32	31	25	37	25	47	35	30	26	22	12	25	14	26	11	28	23	1	12	31	23.8
Elkins	Maximum	39	38	34	40	56	53	50	39	37	46	45	34	32	48	45	49	57	59	43	30	22	37	48	34	40	40	35	31	23	37	54	41.1
	Minimum	11	20	13	23	18	34	29	30	22	18	25	30	27	17	25	18	45	37	25	20	18	9	21	21	23	20	31	15	10	14	31	22.6
Fairmont§	Maximum	41	33	35	45	54	51	41	42	40	48	51	34	32	50	51	59	60	43	32	33	24	45	45	34	34	42	38	30	25	37	45	41.1
	Minimum	13	16	13	16	20	22	35	28	22	18	21	29	29	25	26	26	28	36	30	25	21	16	19	13	14	17	18	24	8	11	13	21.0
Glenville	Maximum	42	34	34	42	51	55	52	45	45	50	51	43	40	53	55	61	64	60	43	36	33	33	48	30	35	35	37	36	26	36	45	43.5
	Minimum	14	20	14	26	19	30	31	22	23	18	26	31	31	27	38	26	31	37	29	25	22	11	26	19	22	14	30	24	5	12	31	23.7
Grafton	Maximum	42	41	34	42	56	55	52	43	40	46	52	45	35	51	50	57	61	61	38	31	30	34	34	31	36	40	39	32	25	38	46	42.5
	Minimum	13	27	12	27	19	30	30	29	22	13	26	33	31	24	37	25	44	37	30	23	22	11	27	11	28	20	32	25	9	12	33	24.6
Lost Creek	Maximum	42	35	33	46	55	52	52	43	40	50	48	42	34	54	51	61	62	58	43	33	30	35	47	30	38	38	37	34	24	36	46	42.9
	Minimum	11	26	10	25	16	30	34	28	18	15	24	32	20	24	37	23	48	36	29	17	21	10	25	15	25	18	30	21	5	9	30	23.0
Mannington	Maximum	40	38	31	44	53	53	52	43	39	45	47	44	34	50	50	59	62	54	42	32	31	30	46	28	35	35	36	31	24	34	45	41.5
	Minimum	11	26	9	25	17	28	34	27	18	15	25	32	30	24	36	23	40	34	29	24	21	11	25	12	26	12	30	21	3	6	29	22.7
Morgantown	Maximum	38	38	28	40	50	52	51	39	34	47	49	41	34	47	46	53	60	52	41	31	29	35	46	27	34	37	34	31	22	33	46	40.2
	Minimum	13	24	13	25	28	37	31	28	20	24	31	32	28	24	36	27	44	34	29	24	20	13	23	11	24	17	29	18	6	7	..	24.0
New Cumberland	Maximum	37	37	22	40	50	50	51	35	36	42	43	38	33	46	40	45	52	45	35	32	27	24	37	22	31	32	30	28	20	26	41	36.4
	Minimum	8	22	8	18	17	32	32	28	20	16	26	30	28	29	28	20	40	30	27	24	18	6	21	2	20	3	24	14	-3	-8	13	19.1
New Martinsville	Maximum	43	41	32	45	55	53	55	43	40	48	42	40	38	53	50	62	60	52	39	34	31	30	42	30	38	33	35	31	26	34	44	41.9
	Minimum	14	27	12	24	21	22	35	29	23	18	28	32	31	31	36	27	42	35	30	27	26	14	25	11	25	14	28	12	1	5	29	23.7
Parkersburg	Maximum	41	39	30	42	53	55	50	42	39	45	44	37	35	54	45	59	60	40	37	35	27	44	44	29	32	29	31	25	22	31	49	40.2
	Minimum	15	23	17	27	25	41	33	29	24	22	31	33	31	29	32	30	40	34	29	25	22	19	15	9	16	10	21	7	2	9	31	23.6
Parsons	Maximum	32	39	34	50	53	56	48	39	38	46	45	37	33	38	43	50	59	57	60	30	25	32	47	39	38	41	35	33	22	40	43	41.4
	Minimum	8	20	12	16	18	28	31	27	23	14	24	30	29	18	27	14	39	40	27	21	19	9	27	21	27	18	31	18	2	15	31	22.1
Philippi	Maximum	44	36	35	48	40	53	51	40	43	34	41	41	35	40	50	50	59	58	46	34	31	35	52	32	32	43	38	35	27	44	46	41.7
	Minimum	12	26	11	28	16	29	35	25	22	16	24	32	30	21	36	23	40	36	29	18	18	8	26	17	26	21	31	21	6	11	32	23.4
Pickens	Maximum	43	32	35	36	60	55	49	44	42	50	43	33	28	51	44	58	53	55	56	29	20	36	43	36	40	43	28	24	33	40	43	41.4
	Minimum	13	18	10	25	25	27	25	22	19	27	23	20	22	34	28	42	49	22	19	15	0	21	21	20	15	17	7	12	24	22	21.6
Terra Alta	Maximum	38	32	30	27	40	45	37	45	36	50	40	40	30	48	48	54	52	50	46	48	40	30	30	26	38	36	34	34	30	36	48	39.3
	Minimum	15	6	0	14	16	18	18	20	21	20	14	12	6	16	30	30	28	28	16	17	10	11	18	12	17	18	12	10	2	10	20	15.6
Wellsburg	Maximum	35	33	25	37	46	50	49	35	36	40	43	39	31	41	39	46	53	47	35	32	26	28	28	24	31	30	28	28	11	29	41	35.4
	Minimum	12	23	10	22	25	35	32	23	25	19	31	31	27	26	32	28	39	31	27	25	18	11	11	5	20	7	24	11	0	3	22	21.1
Weston§	Maximum	40	34	33	44	46	54	40	40	48	50	36	40	50	60	64	60	..	..	44	34	28	48	46	36	..	..	..	38	28	26	42	58	43.2
	Minimum	14	26	12	22	19	30	36	28	18	28	32	29	25	28	34	42	40	..	..	22	20	10	22	16	20	..	..	20	12	14	22	23.7
Wheeling§	Maximum	41	34	31	43	54	54	41	45	41	46	39	38	34	50	49	56	59	38	34	36	28	37	41	34	36	36	31	27	25	35	43	39.9
	Minimum	15	15	11	11	21	22	35	30	23	21	21	23	31	30	30	27	28	34	30	28	23	12	14	10	10	9	13	23	1	0	5	19.5
Southern Section.																																	
Beckley	Maximum	45	51	51	48	45	55	44	54	47	46	45	43	41	45	51	68	60	57	51	52	58	30	30	29	48	47	49	42	42	40	45	47.1
	Minimum	10	24	13	10	20	37	21	22	20	21	20	30	20	21	20	27	30	32	30	20	10	8	15	10	12	22	23	22	12	20	28	20.3
Bluefield	Maximum	..	40	..	45	50	..	50	40	40	..	50	33	30	52	50	55	..	57	59	30	24	35	49	..	39	35	34	33	35	40	..	41.9
	Minimum	..	15	..	15	30	..	35	24	30	..	24	29	25	22	37	32	..	42	25	23	15	8	16	..	25	24	30	22	16	21	..	24.4
Charleston	Maximum	47	44	34	45	58	56	54	43	46	48	48	41	45	57	53	63	64	51	43	35	32	36	52	32	35	35	35	34	32	34	49	44.5
	Minimum	17	32	15	28	24	38	33	24	25	24	30	32	31	29	41	29	51	36	30	30	23	16	27	18	27	20	30	24	10	24	33	27.5
Elkhorn	Maximum	37	36	37	46	48	50	51	40	40	47	44	36	34	52	49	56	62	60	56	33	27	38	54	38	37	40	38	36	38	46	63	44.2
	Minimum	18	33	20	32	31	40	37	24	30	24	35	33	30	27	40	36	48	40	32	27	21	10	35	29	34	27	36	22	17	30	39	30.2
Green Sulphur Spgs.	Maximum	40	40	32	45	48	43	46	41	42	46	37	35	34	42	48	54	57	49	59	35	34	35	46	33	35	34	35	34	35	38	41	41.1
	Minimum	-3	19	10	12	14	32	34	18	22	12	15	31	28	24	28	19	44	47	28	23	18	8	29	25	27	24	28	24	13	18	28	22.5
Hinton§	Maximum	37	42	33	42	46	42	45	46	44	47	37	35	32	35	48	55	53	54	37	37	27	35	41	32	35	34	36	33	38	38	..	39.9
	Minimum	14	15	14	16	19	19	33	21	23	21	23	29	30	29	30	25	25	34	33	23	20	14	20	26	28	26	26	31	17	16	25	23.4
Holcomb§	Maximum	42	35	35	39	36	55	40	44	45	50	42	33	31	52	52	50	52	58	32	28	26	44	50	40	35	38	34	27	30	36	57	40.9
	Minimum	10	10	11	17	20	20	28	20	15	18	25	31	27	18	23	22	29	36	28	25	18	0	23	20	31	16	28	23	5	9	22	20.3
Huntington§	Maximum	42	36	32	42	52	56	40	44	42	41	44	41	34	36	52	48	60	58	39	35	34	48	38	32	28	31	34	25	37	46	46	41.1
	Minimum	19	19	18	20	23	23	36	29	26	24	23	25	34	31	29	28	29	29	34	30	30	21	25	14	14	17	17	25	8	10	36	24.1
Lewisburg	Maximum	30	34	28	38	42	40	43	39	39	45	42	34	33	35	45	49	46	58	48	31	24	28	42	33	34	32	35	34	33	35	34	37.5
	Minimum	4	15	7	21	15	29	35	23	26	17	25	31	28	26	27	22	34	43	28	22	17	7	26	25	25	24	28	23	13	19	26	22.9
Madison§	Maximum	38	37	37	39	56	..	56	46	35	..	35	31	35	38	..	63	64	42	33	..	..	51	46	34	..	40	..	29	35	42	..	41.8
	Minimum	18	18	16	16	22	24	..	22	23	21	..	22	21	28	28	..	28	35	32	22	..	..	14	18	18	..	30	..	9	14	33	22.2
Marlinton	Maximum	36	30	28	34	38	36	40	35	34	38	28	34	36	38	40	42	34	34	46	32	20	22	38	34	32	30	31	30	30	32	33	33.7
	Minimum	0	12	2	20	6	28	32	16	20	10	20	28	24	22	28	12	28	32	24	20	16	5	22	24	26	16	26	20	6	17	24	18.9
Point Pleasant	Maximum	40	40	34	43	55	55	55	45	42	49	45	40	35	55	51	61	58	49	37	38	31	34	46	27	32	32	35	31	28	31	45	41.9
	Minimum	13	25	12	27	18	32	33	26	18	19	27	31	30	25	31	25	46	31	28	27	20	15	23	8	23	8	24	17	5	15	28	22.9
Powellton	Maximum	44	39	..	..	..	..	..	46	45	..	48	41	58	45	51	58	64	57	53	36	32	39	50	..	42	37	42	37	32	37	52	44.4
	Minimum	18	30	..	28	25	..	..	23	26	..	26	32	31	25	35	28	49	39	31	28	23	13	29	..	30	27	31	25	12	23	32	27.7
Robertsburg§	Maximum	45	47	41	55	61	56	48	55	51	53	46	35	35	54	55	60	58	40	35	35	25	45	38	30	30	32	35	30	25	37	57	43.5
	Minimum	11	17	13	14	10	21	26	23	21	19	19	33	30	25	23	25	25	33	28	25	20	9	20	11	13	11	14	22	3	4	20	19.0
Ryan	Maximum	40	44	40	42	55	55	50	44	40	49	54	49	32	55	56	61	60	50	40	34	30	36	48	28	30	37	34	32	27	34	46	43.0
	Minimum	11	24	10	25	17	31	32	20	17	15	24	32	30	24	32	22	40	34	28	24	21	24	25	14	25	10	27	16	-1	17	31	22.6
Spencer§	Maximum	46	32	45	46	50	60	42	48	45	50	42	35	34	55	60	64	60	42	33	35	21	48	35	33	33	34	34	29	29	39	58	42.5
	Minimum	12	15	29	18	24	25	35	22	19	16	24	32	30	23	34	24	46	38	20	24	21	6	21	15	27	11	28	25	-1	14	24	22.6
Union§	Maximum	36	35	37	38	43	44	43	40	42	36	35	36	36	40	44	53	57	60	36	35	26	45	45	45	34	31	35	29	36	38	47	39.9
	Minimum	6	10	9	18	14	21	38	23	25	26	24	20	24	26	28	27	32	36	29	23	12	10	18	20	25	25	26	28	16	20	22	22.0
Williamson§	Maximum	43	39	35	48	51	50	38	43	42	47	38	32	33	47	48	61	60	44	33	32	25	45	40	31	30	30	31	28	29	38	60	40.4
	Minimum	16	16	16	16	23	23	38	22	22	24	24	30	28	27	27	27	28	37	29	28	20	15	21	20	20	25	26	26	15	15	24	23.5

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Total Precipitation. Inches. January, 1913.
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

Stack
WE
OF THE
UNIVERSITY OF ILLINOIS
10 APR 1915

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

FEBRUARY, 1915

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
APRIL 2, 1915

Departure of the Mean Temperature from the Normal, February, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIII. PARKERSBURG, W. VA., FEBRUARY, 1915. NO. 2.

GENERAL SUMMARY.

The past month was the warmest February of record, except in 1909. Although the month was abnormally warm, the highest temperature recorded was only 72°, while readings below zero occurred at only three stations. The precipitation averaged slightly below the normal, with a favorable distribution, but the snowfall was the lowest of record for February, except in 1909. In many sections of the eastern and southwestern counties, the snowfall was unimportant. A moderate flood occurred in the Ohio river early in the month. The conditions were favorable for outdoor work and much plowing was done.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.14 and 30.15 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.58 inches on the 10th, and 29.61 inches on the 2d. Elkins, 30.66 inches on the 10th, and 29.56 inches on the 2d.

TEMPERATURE.

The monthly mean for the State, 53 stations reporting, was 38.4°. The mean departure from the normal for 44 stations having ten or more years of record was plus 6.9°. The temperatures were abnormally high on the 1st-7th, 11-16th, and 19-24th, except the 3d, with the highest readings occurring at most stations on the 13-14th and 21st-23d. Abnormally low temperatures prevailed on the 6-10th and 27-28th, with lowest readings in nearly all sections on the 10th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 78 per cent; 8 p. m., 71 per cent. The February averages for the same hours for the past 26 years are 83 and 76 per cent, respectively. Elkins, 8 a. m., 85 per cent; 8 p. m., 75 per cent. The February averages for Elkins for the same hours for the past 14 years are 85 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 61 stations reporting, was 3.07 inches. The departure from the normal for 50 stations having ten or more years of record was minus 0.16 of an inch. Heavy rain fell on the 1st-2d and rain or snow on the 3d, followed by scattered showers on the 4th and 5th, while moderate rain or snow occurred on the 6th, with scattered light rains or snows on the 7th, 8th, and 9th. Scattered showers fell on the 12th, 13th, and 14th, moderate rain on the 15th, and rain or snow in most sections daily from the 23d to the 26th, the amounts being moderately heavy on the 24th.

RIVERS.

Heavy rain, high temperatures, and melted snow caused a moderate flood in the district on the 3d-9th. The following crest stages occurred: Wheeling, 42.2 feet; Parkersburg, 42.2 feet; Point Pleasant, 49.8 feet; Huntington, 51.1 feet. Not much damage resulted.

WIND.

The average wind velocity at Parkersburg was 6.1 miles per hour, or 1.2 miles below the February average for the past 25 years. The average at Elkins was 4.6 miles per hour, or 1.0 mile below the February average for 15 years. The highest velocity at Parkersburg was 24 miles per hour from the northwest on the 26th, and at Elkins 25 miles per hour from the southeast on the 5th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 35 per cent of the possible amount, or 2 per cent below the February average for 17 years. The average at Elkins was 36 per cent, or 1 per cent above the February average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bayard, 1st, 2d, and 3d; Burlington, 13th; Charleston, 2d, 13th, and 17th; Davis, 4th and 25th; Elkins, 13th and 23d; Fairmont, 13th; Grafton, 5th, 11th, 12th, 13th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, and 23d; Hinton, 13th and 17th; Lost City, 3d and 5th; Mannington, 1st, 2nd, and 13th; Marlinton, 13th; Philippi, 1st, 13th and 17th; Pickens, 3d and 15th; Rowelesburg, 13th; Wellsburg, 1st and 13th; Wheeling, 20th; Williamson, 2d, 10th, 13th, 17th, and 18th.

Hail: Holcomb, 2d.

Halo, lunar: Bayard, 20th; Elkins, 19th and 21st; Parkersburg, 28th; Philippi, 20th; Pickens, 19th and 21st; Upper Tract, 20th and 22d; Wellsburg, 20th.

Halo, solar: Upper Tract, 21st; Wellsburg, 15th and 20th.

Haze: Bayard, 4th, 13th, 14th, and 17th: Philippi, 18th.

Sleet: Bayard, 3d; Marlinton, 5th; Wheeling, 25th.

Thunderstorms: Cheatbridge, Fairmont, Green Sulphur Springs, Grafton, Holcomb, Marlinton, Morgantown, Nuttallburg, Philippi, and Powellton, 2d.

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in Inches.
1891	38.1	..	....	5.39	....
1892	37.1	72	−12	2.30	....
1893	35.0	71	− 6	4.81	....
1894	33.4	74	− 5	3.99	....
1895	22.8	79	−17	1.27	...
1896	33.4	62	− 5	3.31	....
1897	36.8	70	3	5.95	....
1898	32.7	74	−13	1.84	....
1899	26.1	69	−35	4.32	19.0
1900	30.7	83	−11	3.94	10.1
1901	27.1	62	− 6	0.86	4.1
1902	26.7	68	−14	3.20	8.1
1903	35.3	74	−19	5.99	8.6
1904	29.3	80	−13	2.37	8.1
1905	25.6	56	−22	2.34	8.1
1906	32.4	79	−11	1.60	8.1
1907	31.1	68	−23	2.55	11.1
1908	30.9	72	−10	3.72	15.8
1909	40.4	80	5	4.16	3.4
1910	31.5	72	−11	3.18	13.5
1911	38.7	76	6	2.03	4.8
1912	27.3	70	−17	2.45	6.4
1913	32.6	80	− 4	2.27	4.7
1914	28.4	70	−22	3.64	19.7
1915	38.4	72	− 2	3.07	3.6
Entire period	32.1	83	−35	3.22	9.2

Climatological Data for February, 1915.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	32.5	+5.6	61	23	−2	10	44	3.14	−0.33	0.75	6.0	13	8	7	13	w.	Solomon Clark
Burlington	Mineral	875	20	34.8	+5.1	66	23	10	10	40	1.62	−0.88	0.40	4.0	7	8	11	9	w.	J. W. Vandiver
Franklin	Pendleton	641	8	35.6	.....	53	23	13	10	34	.....	.....	.....	.....	....	16	9	3	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	4.00	+1.39	1.60	1.5	6	.....	.....	.....	sw.	S. W. Lightner
Lost City	Hardy	.....	8	36.4	.....	58	23	12	10	28	3.37	.....	1.24	T.	6	11	10	7	.....	B. D. Hinegardner
Martinsburg	Berkeley	435	23	35.5	+6.0	62	23	15	10	34	4.32	+1.93	.....	T.	7	14	3	11	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	33.9	+2.3	58	12	12	20	36	3.04	+0.59	1.25	.....	6	11	10	7	nw.	John C. Fisher
Romney [b]	Hampshire	824	17	37.8	+6.8	68	23 †	13	10	38	2.29	+0.05	1.10	.....	5	.....	.....	.....	.....	Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	37.8[a]	+6.1	64 [a]	23 †	9 [a]	10	45[a]	0.90	−0.84	0.40	.....	4	18	6	4	w.	J. M. Mallow
Averages and	Extremes	.....	....	35.5	+5.3	68	23 †	−2	10	45	2.84	+0.27	1.60	2.3	7	12	8	8	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	39.2	+8.5	65	23	15	10	38	2.29	−1.00	0.60	4.0	12	15	4	9	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	4.46	.....	1.35	6.0	10	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	37.6	+6.8	67	23	12	10	46	3.96	+0.19	0.90	5.0	12	12	5	11	.....	H. A. Darnall
Cairo [g]	Ritchie	674	12	40.2	+8.2	68	14 †	6	9	45	3.92	+0.35	1.00	.....	.....	.....	.....	.....	.....	Van A. Zevely
Central Station	Doddridge	950	12	39.0	+9.0	69	23	7	9	50	2.00	−0.96	0.40	4.5	15	7	11	10	w.	G. W. Sherwood
Cheat Bridge	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	4.54	.....	1.50	.....	11	.....	.....	.....	.....	Franz A. Degler
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	4.83	.....	1.15	3.0	10	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	40.2	+.8€	68	13 †	9	9	48	2.88	+0.20	0.63	2.3	11	7	3	18	w.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	6.33	.....	1.30	12.5	14	7	4	17	sw.	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	2.33	.....	0.60	.....	9	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	36.8	+5.3	65	21	5	10	46	2.62	−0.55	0.58	5.5	14	7	6	15	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	38.0	+4.4	71	23	13	10	48	2.99	+0.02	1.03	2.0	12	12	2	14	w.	F. P. Hall
Glenville	Gilmer	738	25	40.8	+9.1	68	22 †	8	9	47	1.99	−1.84	0.50	2.0	10	11	1	16	s.	M. T. Brannon
Grafton	Taylor	1,000	22	38.1	+7.1	66	23	15	10	39	3.25	+0.02	0.62	2.0	13	12	6	10	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	38.8	+8.8	71	23	10	9 †	49	1.65	−1.40	0.95	1.5	7	8	7	13	w.	Allen Smith
Mannington	Marion	974	12	37.8	+7.9	69	23	9	10	44	2.48	−0.02	0.46	5.2	15	7	4	17	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	39.8	+8.9	69	23	9	10	34	1.53	−1.69	0.61	0.8	6	4	5	19	.....	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	37.3[a]	+5.8	67 [a]	14	10 [c]	10	43[d]	2.46	+0.21	0.75	T.	8	8	7	13	.....	M. Z. White
New Cumberland	Hancock	987	15	35.4	+8.2	64	23	6	10	43	2.20	−0.36	1.00	T.	4	9	2	17	n.	Frank S. Evans
New Martinsville	Wetzel	634	21	39.6	+7.9	66	14	14	9	38	2.20	−0.82	0.79	T.	9	12	1	15	s.	Wm. Ankrom
Osceola *	Randolph	3,600	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. T. Dohmer
Parkersburg	Wood	638	26	39.7	+5.9	66	23	15	10	34	1.80	−1.44	0.66	3.5	11	7	5	16	se.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	36.1	+7.2	68	23	1	10	44	4.34	+0.98	1.00	16.5	12	7	7	14	.....	J. W. Swisher
Philippi	Barbour	1,149	22	39.3	+8.3	70	23	10	10	47	3.11	−0.24	0.54	9.4	15	11	9	8	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	38.2	6.7	71	21	−1	10	53	5.98	+1.17	1.13	22.0	14	8	5	15	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	4.34	+1.06	0.92	4.4	15	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	1.93	.....	0.60	T.	9	.....	.....	.....	.....	J. O. Goodman
Smithfield	Wetzel	835	10	40.6	.....	68	23	11	10	37	4.15	+0.83	1.61	4.0	12	13	7	8	w.	G. M. Whisler
Terra Alta	Preston	2,612	14	37.5	+10.2	67	24	−2	10	38	5.35	+1.54	1.30	2.3	13	.....	.....	.....	.....	H. C. Shafer
Wellsburg	Brooke	1,225	20	35.8	+9.2	64	23	9	10	26	2.00	+0.90	0.80	1.2	12	8	4	16	w.	C. P. Waugh
Weston [d]	Lewis	1,026	26	38.4	+7.1	70	23	8	9	47	3.03	−0.72	0.78	8.6	13	12	5	11	w.	Miss C. M. Davis
Wheeling	Ohio	645	30	38.4	.....	69	23	12	9 †	43	2.77	+0.21	1.18	1.8	14	10	5	13	w.	Miss M. B. Forsyth
Averages and	Extremes	.....	....	38.6	+7.8	71	21 †	−2	10	53	3.28	−0.22	1.50	5.0	12	9	5	14	w.	
Southern Section.																				
Bancroft	Putnam	574	11	39.4	+8.3	70	22	15	10 †	45	3.26	+0.81	0.97	1.5	11	7	7	14	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	39.8	+7.8	68	2	10	10	40	2.45	−0.69	0.70	4.0	9	11	0	17	w.	John A. Ewart
Bluefield	Mercer	2,558	20	40.1[d]	+6.9	66 [d]	21	15 [d]	10	36[d]	2.30	−0.83	0.66	1.0	7	13	3[b]	10	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	43.2	+5.3	71	14 †	18	10	40	2.77	−0.78	0.98	0.5	13	11	3	14	w.	R. C. Hewes
Clay	.....	706	0	39.4[a]	.....	70 [a]	23	5	10	46[a]	3.60	.....	0.90	2.0	9	11	3	14	.....	Prof. E. H. Knabenshue
Cuba	Jackson	650	14	41.0	+9.4	70	14	4	8	48	1.73	−1.08	0.42	2.0	10	7	9	12	w.	C. T. Perry
Dunlow	Wayne	717	7	40.6	.....	65	10 †	17	8	46	4.40	.....	1.90	T.	7	9	11	8	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	43.4	+8.1	68	13	17	10	35	3.38	+0.29	0.91	1.5	9	13	5	10	w.	J. J. Lincoln
Evans	Jackson	606	0	.....	.....	.....	.....	.....	.....	.....	2.21	.....	0.57	.....	11	11	3	14	.....	B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	38.0	+6.1	65	13 †	10	10	49	2.60	+0.16	0.68	T.	7	13	2	13	n.	W. H. Gwinn
Hinton	do	1,450	25	39.0	+4.9	68	22 †	16	10	48	2.78	−0.28	0.78	T.	11	11	2	15	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	35.4	.....	65	20	4	10	49	3.59	+0.40	1.08	15.0	14	10	3	15	.....	R. E. Ferguson
Huntington	Cabell	538	19	39.9	+8.1	67	23	20	10 †	38	2.23	−0.74	0.62	0.4	11	7	3	18	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	37.7	+6.5	64	22	11	10	40	2.94	0.03	1.20	0.5	6	10	7	11	nw.	Geo. T. Argabrite
Logan *	Logan	687	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. I. E. McDonald
Madison	Boone	704	9	41.4[b]	.....	72 [b]	23	18 [i]	.....	45[i]	2.93	.....	1.12	5.0	10	.....	.....	.....	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	32.6	+3.5	56	22	4	10	40	4.16	+0.78	1.20	T.	7	7	14	7	sw.	S. L. Brown
Nuttallburg [d]	Fayette	2,252	22	36.4	+4.7	60	22	10	.....	.....	2.20	−0.62	0.50	11.0	7	8	8	8	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	39.6	+6.7	68	14 †	14	10	42	2.90	−0.71	0.90	T.	13	8	0	20	se.	W. D. Holmes
Powellton [c]	Fayette	933	17	42.9	+8.1	71	13 †	15	10	44	2.83	−0.15	0.98	1.4	8	8	7	10	.....	F. L. Evans
Robertsburg	Putnam	574	14	38.3	+5.8	68	14 †	14	10	44	2.40	−0.80	0.60	T	8	8	1	19	w.	E. C. Brace
Ryan	Roane	700	11	39.2	+6.5	70	23	10	10	47	3.26	0.0	0.97	2.8	15	9	7	12	.....	Wm. E. Ryan
Spencer	do	784	16	38.4	.....	72	23	9	10	49	2.78	−0.34	0.57	5.9	10	9	11	8	.....	A. M. McKown
Sutton *	Braxton	839	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ben Gillespie
Union	Monroe	2,250	10	38.5	+5.7	65	14 †	11	10	42	3.49	+1.08	11.5	T.	8	.....	.....	.....	.....	Shelton Clark
Williamson	Mingo	660	13	39.2	+3.3	69	22	19	8 †	43	2.18	−1.03	0.52	1.0	9	12	1	15	w.	J. F. Keyser
Averages and	Extremes	.....	.....	39.3	+6.4	72	23	4	8 †	49	2.89	−0.25	1.90	2.4	10	10	5	13	w.	
State Averages and	Extremes	.....	.....	38.4	+6.9	72	23	−2	10	53	3.07	−0.16	1.90	3.6	10	10	5	13	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for February, 1915.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac	.42	.75	.25	T.	.02	.14	.10	.10	.05	T.		T.		.18	.34	T.						T.		.54	.10	.15						3.14
Burlington	do	.40	.35			*	.40								.10	.15									.22								1.62
Franklin	do																																
Harpers Ferry	do	.80	1.60	T.	T.		.22	T.	T.					T.		.30	T.								.80	.28							4.00
Lost City	do	1.24	.50			.40									*	.28									.95								3.37
Martinsburg	do	*	2.80			*	.15	T.						T.	*	.60									.77								4.32
Moorefield	do	.35	.47	1.25	T.	T.									.07	.15									.75	T.							3.04
Romney	do	.37	1.10				.15							.07											.60								2.29
Upper Tract	do	.20	.40	T.		T.		T.								.10										.20							0.90
Northern Section.																																	
Bens Run	Ohio	.60	.27	.14		.25	.10	.15	.10				.18		.10									.28	.02	.10							2.29
Brandonville	Monongahela	1.35	.57	.20	.58		.37							.28		.26									.20	.35		.30					4.46
Buckhannon	do	.46	.85	.25		T.	.30	.10	.20	.10			.35		.05	.90									.32	.08							3.96
Cairo	Little Kanawha	1.00	.50	.30		.20	.45	.45	.10		.12		.21	.12		.30							*	*	*	*	*	*	.17				3.92
Central Station	Middle Is. Creek	.40	.40	.15		.02	.15	.08	.07	.01			.06	.04	T.	.11								.05	.25	.10	.11						2.00
Cheat Bridge	Monongahela	1.50	.40	.20		T.	.34	.03	.15	T.						.42	T.						T.		.80	.20	.35	.15					4.54
Cortland	do	1.15	1.00	.50			.29			.20				.19		.24									.63	.53	.10						4.83
Creston	Little Kanawha	.63	.47	.52	T.	T.	.41	T.	.10	.10				.20		.15							T.		.19	.08	.03						2.88
Davis	Monongahela	1.30	1.10	.37	T.		.26	.10	.50	.14	T.			.60		.50	.04							.05	.50	.47	.40						6.33
Elizabeth	Little Kanawha	.60	.34			.34	.37		.12					.15		.35									.12	.03	.06						2.33
Elkins***	Monongahela	.57	.38	.22		.05	.03	.08	.05	T.	T.		.05	T.	.10	.21							T.	.01	.57	.17	.13		T.				2.62
Fairmont	do	1.03	.37	.42	T.		.27	.02	.07	.02	T.			.20		.23								T.	.10	.15	.11						2.99
Glenville	Little Kanawha	.30	.20	.50			.15		.10	.10			T.	.10		.25									.17		.12						1.99
Grafton	Monongahela	.62	.53	.36	.05		.10	T.	.20	T.	.14		.15		.10	.40									.45	.10	.05						3.25
Lost Creek	do	.95	T.	T.		T.	T.	.05	T.	T.			.06		T.	.25							T.	T.	.18	.04	.12						1.65
Mannington	do	.39	.46	.24		.07	.27	.07	.06	T.			.08	.16	.04	.14							.01		.30	.11	.08						2.48
Morgantown	do	.54	.61	T.		.10		.02	.05				.21																				1.53
Moundsville	Ohio	.75	.40				.40		T.	T.			*	.41		.37									.05	.08							2.46
New Cumberland	do	1.00	.60			.30	T.	T.	T.	T.			.30		T.									T.	T.	T.	T.						2.20
New Martinsville	do	.79	.24	T.		.30	.12	T.					.05											.05	.50	.10	.05						2.20
Osceola	Monongahela																																
Parkersburg ***	Ohio	.43	.30	.22		.27	.02	.03	.02	T.			.05	T.	.27							T.	T.	.12	T.	.07							1.80
Parsons	Monongahela	T.	1.00	.30	.30	.12		.15	.30	.30			T.	.37		.50									.70	.10	.20						4.34
Philippi	do	.45	.54	.25	.03	T.	.03	.15	.35	.10			.05		.04	.53								.04	.31	.13	.11						3.11
Pickens	do	.48	.84	.20		.13	.41	.30	1.00	.10			.17			1.13								.03	.59	.30	.30						5.98
Rowlesburg	do	.90	.92	.32	.02		.34	.02	.18	.10	.02			.34		.46	.04								.20	.18	.30						4.34
Saint Marys	Ohio	.20	.60				.20		.10					.12	.45										.10	.06	.10						1.93
Smithfield	Fishing Creek	.47	.61	.55	.12	T.	.58		.20	.10	T.			.55		.25							T.		.35	.32	.05						4.15
Terra Alta	Monongahela	.34	.29	.17		.93		.05	.07	.03		.46	.67		1.30										.96	.02	.06						5.35
Wellsburg	Ohio	.80	.30	T.		.13	.15	.05	.05				.10		.02	.26							T.	.08	.04	.02							2.00
Weston	Monongahela	.78	.32	.20	.10		.20	.10	.20	.18			T.	.15		.36								T.	.12	.16	.16						3.03
Wheeling	Ohio	1.18	.35	.03	.03		.30	.04	.06	.03	T.		T.	.30		.32							.01	T.	.01	.06	.05						2.77
Southern Section.																																	
Bancroft	Great Kanawha	.46	.60	.97	.17	.04	.38	T.	.08	.08						.10								T.		.33	.05						3.26
Beckley	do	.70						.10	.10							.60	.30							.15	.30	.05	.15						2.45
Bluefield	do	.37	.17	.35		.20		.10							.45										.66								2.30
Charleston	do	.26	.55	.98	.08		.26	.02	.06	.02				T.		.22								.10		.06	.08	.08					2.77
Clay	do	.25	.30	.90	.80		.40		.15	.05														.50		.25		T.					3.60
Cuba	Sand Creek	.42	.30	.20		.11	.17	.10	T.			T.			.09	.23								.05	.06	T.	T.	T.					1.73
Dunlow	Big Sandy	1.90	1.80	.20		.15	.10		T.						.10									.15		T.							4.40
Elkhorn	do	.91	.22	.58				T.	.10							.45								.46	.64	.01	.01						3.38
Evans		.46	.30	.57	T.	.28	.07	T.	.02	T.	T.				.02	.28								.05	T.	.09	T.	.07					2.21
Green Sulphur Spgs.	Great Kanawha	.50	.45	.47		.10	.05	T.	T.	T.					.35										T.	.68							2.60
Hinton	do	.30	.72	.28	.04		.08	T.	.04							.28	.14								.78	.08	.04						2.78
Holcomb	do	*	.68	1.08		*	*	*	*	.30					*	.63							T.	*	*	*	.90						3.59
Huntington	Ohio	.54	.18	.62			.30		.03	T.				.04		.30							.08	.04	T.	.06	.04						2.23
Lewisburg	Great Kanawha	.74	.37	.05		T.	.13	T.	T.	T.					T.	.45								T.	1.20	T.	T.						2.94
Logan	Guyandotte																																
Madison	Great Kanawha	.40		1.12				.48	.15	.05						.35		T.						.02	.15	.10	.11						2.93
Marlinton	do	1.20	.62	T.	.38	.10	T.	T.	T.				T.		.08	.60							T.	T.	1.18	T.							4.16
Nuttallburg	do	.20	.30	.50		T.		T.	.40	T.						.50						T.		T.	.10	.20							2.20
Point Pleasant	Ohio	.46	.40	.50			.78	T.	.06	.01			.04			.36							.04	.01	.08	.06	.10						2.90
Powellton	Great Kanawha	.25	.40	.98		.07	.14	T.	T.	.14						.30										.55							2.83
Robertsburg	do	.53	.45	.60	.15		.35		T.							.22								.05	.05								2.40
Ryan	do	.36	.97	.90		.21	T.	.05	.09	.01			.01		.01	.22							.09	.12	.05	.11	.06						3.26
Spencer	Little Kanawha	.45	.57	.17	.12	.34	.18	..	.22	.08		.16		T.											.49	T.	T.						2.78
Sutton	Great Kanawha																																
Union	do	1.05	.52	T.	.18		.14									.28	.12								1.15	.05							3.49
Williamson	Big Sandy	.28	.50	.52			.32	T.	.10							.30	T.								.10	.04	.02						2.18

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

Daily Temperatures for February, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	55	46	34	33	41	40	34	22	19	38	49	48	57	58	55	44	35	36	41	54	55	54	61	59	37	29	28	29	..	..	..	42.5
	Minimum	34	32	25	22	22	30	21	13	14	-2	10	32	37	32	40	29	24	12	9	10	14	28	28	37	28	20	13	15	..	..	..	22.5
Burlington	Maximum	37	38	36	35	38	42	39	30	32	38	42	53	42	50	49	42	43	41	45	51	57	56	66	55	46	39	36	37	..	..	..	43.4
	Minimum	24	32	28	24	26	32	28	22	20	10	16	34	37	34	36	29	27	18	13	15	17	29	30	42	36	29	22	22	..	..	..	26.1
Lost City	Maximum	53	50	38	34	36	44	40	39	28	35	44	52	52	53	54	46	37	33	38	44	50	56	58	54	48	35	32	30	..	..	..	43.3
	Minimum	35	35	32	22	28	31	39	21	22	12	28	34	42	41	43	34	25	18	16	18	22	33	36	48	34	28	23	24	..	..	..	29.4
Martinsburg§	Maximum	38	34	35	35	37	45	38	32	34	38	49	54	42	50	49	44	44	43	46	53	57	56	62	59	44	44	36	43	..	..	..	44.3
	Minimum	23	32	28	18	18	29	31	24	20	15	16	24	37	34	36	37	28	23	23	21	23	25	33	38	39	29	22	22	..	..	..	26.7
Moorefield	Maximum	34	32	36	38	36	32	30	28	42	48	56	58	52	38	34	36	36	38	42	48	36	56	54	42	40	46	36	38	..	..	..	40.8
	Minimum	32	28	30	34	24	28	28	22	20	28	36	34	38	32	32	32	20	18	14	12	26	32	42	30	24	18	20	22	..	..	..	27.0
Romney	Maximum	37	40	35	37	41	47	..	..	42	40	53	55	54	55	51	53	46	42	47	53	58	62	68	68	50	42	34	42	..	..	..	48.2
	Minimum	30	30	25	26	26	32	..	..	20	13	20	33	40	32	28	35	26	20	14	16	20	30	38	48	38	28	22	22	..	..	..	27.4
Upper Tract	Maximum	52	48	..	38	37	37	40	44	30	44	55	55	57	59	57	50	41	40	47	47	60	63	64	64	58	47	39	39	..	..	..	48.6
	Minimum	35	34	..	24	28	27	28	20	22	9	22	40	35	30	48	28	25	16	12	12	15	31	33	34	45	33	29	18	..	..	..	27.1
Northern Section.																																	
Bens Run	Maximum	47	54	40	40	49	48	35	35	29	42	54	51	61	64	52	44	44	48	56	57	63	63	65	53	39	38	42	41	..	..	..	48.4
	Minimum	36	39	28	28	26	35	25	21	23	15	28	40	41	40	39	35	25	24	27	25	25	37	38	39	33	29	20	23	..	..	..	30.1
Buckhannon	Maximum	58	60	44	40	50	45	35	25	26	37	52	52	60	64	56	49	37	47	55	55	65	59	67	62	40	35	36	34	..	..	..	48.0
	Minimum	48	41	28	25	26	35	24	15	13	12	22	28	35	38	41	32	25	19	19	19	19	35	34	38	29	25	18	18	..	..	..	27.2
Central Station	Maximum	58	59	48	45	49	47	36	29	28	52	53	52	64	66	61	48	47	51	62	63	68	68	69	53	39	39	38	38	..	..	..	51.1
	Minimum	37	43	28	25	27	34	24	18	7	9	22	40	35	41	39	32	18	18	19	18	18	34	35	39	32	32	14	19	..	..	..	27.0
Creston	Maximum	57	57	48	42	51	48	38	31	32	48	55	56	68	68	62	50	47	53	59	63	68	67	67	55	42	42	47	45	..	..	..	52.4
	Minimum	36	45	32	29	30	36	29	19	9	10	24	35	35	41	42	31	20	19	17	19	20	37	34	41	33	30	18	17	..	..	..	28.1
Elkins	Maximum	57	58	43	50	47	43	31	21	22	45	53	51	65	59	54	38	39	47	50	59	65	57	63	51	35	32	30	34	..	..	..	46.4
	Minimum	49	43	26	26	33	31	19	15	17	5	23	45	39	50	38	27	20	17	16	17	19	33	32	35	29	25	18	15	..	..	..	27.2
Fairmont§	Maximum	54	61	31	49	51	40	29	25	27	49	51	50	65	65	52	40	46	48	61	62	69	64	71	50	33	38	42	42	..	..	..	48.8
	Minimum	37	44	31	25	26	30	27	18	16	13	14	28	42	42	43	30	22	20	20	20	21	26	35	37	32	25	18	19	..	..	..	27.2
Glenville	Maximum	60	61	47	45	51	52	40	31	31	45	57	58	66	67	64	65	44	51	59	63	67	68	68	66	43	42	40	41	..	..	..	53.3
	Minimum	36	44	31	30	29	31	28	20	8	12	24	34	38	40	42	35	21	20	18	20	20	37	34	41	33	30	20	19	..	..	..	28.4
Grafton	Maximum	56	61	51	47	50	52	40	28	25	34	52	49	52	58	58	48	38	38	48	54	60	62	66	65	42	34	33	34	..	..	..	47.7
	Minimum	31	40	30	27	29	38	26	19	20	15	24	34	40	37	34	34	20	22	21	22	21	35	34	42	31	32	19	22	..	..	..	28.5
Lost Creek	Maximum	60	60	49	43	51	50	37	27	26	46	54	53	64	66	60	48	40	45	57	63	66	62	71	61	40	39	40	40	..	..	..	50.6
	Minimum	39	48	29	26	26	37	26	18	10	10	21	44	38	36	41	29	18	22	17	16	17	34	32	39	32	27	12	15	..	..	..	27.1
Mannington	Maximum	52	58	48	39	48	47	37	27	26	40	52	52	64	65	61	50	39	44	54	58	63	60	69	63	41	36	36	35	..	..	..	48.7
	Minimum	33	42	28	25	26	36	25	19	10	9	21	35	42	34	42	31	20	20	17	18	19	34	32	41	33	26	16	21	..	..	..	27.0
Morgantown	Maximum	66	67	44	41	51	47	37	25	24	43	50	50	64	64	57	39	37	42	48	57	62	60	69	62	41	40	34	35	..	..	..	48.4
	Minimum	46	43	24	22	32	37	24	18	16	9	29	45	45	46	35	32	23	18	25	30	30	45	49	40	39	31	18	20	..	..	..	31.1
New Cumberland	Maximum	48	47	47	37	41	45	33	25	24	38	50	50	61	60	55	45	40	41	48	57	63	55	64	54	38	35	35	38	..	..	..	45.1
	Minimum	40	37	20	17	28	32	20	18	8	6	10	37	37	43	37	32	26	17	17	20	20	37	40	38	30	18	16	18	..	..	..	25.7
New Martinsville	Maximum	47	56	46	48	49	50	38	28	28	42	52	50	64	66	61	48	43	50	58	60	62	62	62	54	41	41	41	40	..	..	..	49.5
	Minimum	36	38	29	27	30	34	25	21	14	15	27	41	42	40	40	35	25	24	25	24	24	35	36	40	34	28	20	22	..	..	..	29.7
Parkersburg	Maximum	56	52	34	39	51	44	34	26	28	41	56	54	64	65	53	45	40	46	53	59	63	64	66	55	36	37	38	35	..	..	..	47.6
	Minimum	41	34	28	28	34	34	22	21	16	15	34	48	40	53	37	33	27	26	28	28	29	44	45	36	33	30	21	24	..	..	..	31.8
Parsons	Maximum	57	52	31	50	45	39	37	24	21	43	52	50	65	63	57	38	41	45	50	58	60	64	68	56	40	32	35	35	..	..	..	47.1
	Minimum	37	40	27	25	33	32	23	16	11	1	18	25	40	48	38	21	19	14	13	14	30	34	30	38	30	20	13	14	..	..	..	25.1
Philippi	Maximum	60	57	50	44	50	50	38	28	27	42	52	51	66	66	58	49	39	48	55	58	65	61	70	64	41	36	38	37	..	..	..	50.0
	Minimum	45	47	29	27	28	37	26	18	17	10	22	40	38	39	43	34	20	18	17	17	18	34	37	41	33	27	21	18	..	..	..	28.6
Pickens	Maximum	56	62	47	42	56	42	32	20	20	52	57	52	68	65	63	39	44	60	67	67	71	56	64	49	35	32	37	44	..	..	..	50.0
	Minimum	41	40	26	20	26	32	20	12	15	1	24	38	36	45	37	27	19	23	18	23	27	39	39	34	25	20	15	18	..	..	..	26.4
Terra Alta	Maximum	54	52	46	44	57	44	34	22	24	36	47	50	58	54	50	44	42	50	58	60	60	62	66	67	50	32	35	38	..	..	..	47.7
	Minimum	45	36	30	26	35	19	18	11	13	-2	28	30	39	37	36	35	30	34	30	34	32	34	36	32	25	17	14	11	..	..	..	27.3
Wellsburg	Maximum	50	53	38	34	45	45	32	21	23	35	47	49	59	62	54	40	36	39	47	52	53	48	64	52	38	33	32	33	..	..	..	42.4
	Minimum	40	38	20	19	30	32	21	18	11	9	26	43	40	43	37	32	26	18	31	27	30	42	43	38	31	20	16	17	..	..	..	28.1
Weston§	Maximum	60	58	34	42	52	40	30	26	30	50	54	56	66	65	52	42	40	48	60	62	68	65	70	45	34	34	38	38	..	..	..	48.5
	Minimum	40	48	32	28	28	28	26	18	8	10	24	38	42	40	42	34	20	18	20	22	21	37	34	44	32	27	18	17	..	..	..	28.4
Wheeling§	Maximum	44	64	39	41	48	39	32	30	33	44	55	54	67	68	55	47	45	48	55	60	67	63	69	51	39	41	39	42	..	..	..	49.2
	Minimum	35	38	29	29	29	31	27	23	12	12	13	36	40	37	38	35	26	23	23	23	24	24	37	39	34	24	14	14	..	..	..	27.5
Southern Section.																																	
Beckley	Maximum	63	68	50	56	46	64	45	30	36	35	37	45	60	61	61	60	56	60	61	60	62	64	61	63	45	44	48	50	..	..	..	53.2
	Minimum	30	32	20	29	35	30	28	16	21	10	18	30	30	30	21	30	30	21	23	20	23	30	28	34	30	29	29	30	..	..	..	26.3
Bluefield	Maximum	58	61	51	52	46	49	..	40	31	50	55	57	65	..	57	45	47	52	47	55	66	..	61	51	39	36	40	..	..	..	..	50.5
	Minimum	29	44	28	27	31	37	..	16	18	15	27	37	33	..	43	32	24	22	29	29	30	..	47	37	29	26	23	..	..	..	..	29.7
Charleston	Maximum	60	59	40	53	54	52	41	30	34	52	65	65	68	71	62	52	48	54	59	62	67	68	71	58	43	42	43	43	..	..	..	54.1
	Minimum	41	39	33	33	39	39	30	22	26	18	28	35	40	44	44	36	25	22	23	24	27	40	41	41	35	32	24	21	..	..	..	32.2
Elkhorn	Maximum	63	60	56	58	55	47	42	35	34	52	58	60	68	61	60	50	50	54	50	57	63	65	64	58	42	39	42	45	..	..	..	53.1
	Minimum	56	44	32	32	37	41	30	19	20	17	31	38	37	46	47	36	26	24	34	31	30	44	42	42	32	29	24	22	..	..	..	33.7
Green Sulphur Spgs.	Maximum	55	61	49	51	47	48	39	32	29	45	57	54	65	64	58	47	48	53	54	55	61	65	65	52	45	39	40	42	..	..	..	50.7
	Minimum	36	45	30	30	32	30	28	12	12	10	19	25	28	46	30	32	19	12	12	12	12	29	34	42	30	27	22	12	..	..	..	25.3
Hinton§	Maximum	51	61	36	53	43	52	38	30	36	47	57	60	66	67	51	45	50	53	50	47	54	68	68	50	37	41	42	44	..	..	..	49.9
	Minimum	31	40	34	32	32	33	31	21	20	16	17	22	29	35	48	33	25	20	21	20	20	20	36	40	33	29	25	20	..	..	..	28.0
Holcomb§	Maximum	56	61	32	52	42	38	29	22	25	49	57	42	50	62	60	50	45	31	52	65	50	60	64	48	32	35	38	38	..	..	..	45.9
	Minimum	40	40	29	21	26	31	25	14	15	4	8	23	30	34	40	46	18	16	17	18	22	20	33	36	28	25	18	20	..	..	..	24.9
Huntington§	Maximum	58	52	40	46	51	40	32	30	35	45	58	60	64	66	52	44	42	46	53	56	60	66	67	47	35	40	40	37	..	..	..	48.6
	Minimum	36	43	35	32	32	36	29	22	22	20	20	38	36	36	41	35	26	27	26	26	26	28	43	45	35	32	25	23	..	..	..	31.2
Lewisburg	Maximum	44	56	49	48	48	45	38	38	39	44	53	55	61	60	56	45	48	51	47	55	59	64	60	51	41	35	38	41	..	..	..	48.9
	Minimum	32	37	31	29	29	27	26	16	19	11	18	27	32	39	44	32	20	18	17	18	19	29	35	40	30	26	22	20	..	..	..	26.5
Madison§	Maximum	..	63	..	..	..	56	33	30	..	50	..	..	68	70	..	..	..	50	60	62	67	70	72	46	40	42	40	..	..	..	..	54.1
	Minimum	41	..	33	..	..	:	30	20	21	..	18	..	..	31	47	..	23	..	21	21	25	25	38	40	40	32	21	21	..	..	..	28.8
Marlinton	Maximum	36	49	42	38	36	39	33	24	32	36	44	49	55	50	44	38	42	44	41	48	52	56	54	48	40	32	30	36	..	..	..	41.7
	Minimum	30	32	28	22	25	30	24	12	14	4	32	24	30	40	34	28	19	12	9	10	12	28	26	38	28	26	20	17	..	..	..	23.4
Point Pleasant	Maximum	54	51	42	39	50	48	36	30	31	45	58	56	63	68	57	47	45	49	59	60	64	68	68	57	42	42	43	41	..	..	..	50.5
	Minimum	34	39	30	28	30	33	26	17	23	14	26	44	33	38	37	32	21	20	21	22	22	42	39	39	31	29	18	17	..	..	..	28.8
Powellton	Maximum	62	64	55	55	49	52	42	34	32	50	60	60	71	68	65	55	47	50	..	..	..	..	70	71	62	46	40	44	42	..	..	53.8
	Minimum	38	43	32	33	38	39	30	20	20	15	27	33	36	50	45	36	24	22	..	..	..	26	40	43	34	31	25	20	..	..	..	32.0
Robertsburg§	Maximum	58	45	35	45	55	40	30	28	30	50	58	58	65	68	50	45	45	50	60	63	65	68	67	45	35	45	40	36	..	..	..	49.2
	Minimum	34	42	30	31	30	30	28	19	20	14	15	28	34	34	38	30	21	22	20	21	22	24	38	40	32	30	20	19	..	..	..	27.4
Ryan	Maximum	55	57	44	41	50	45	36	28	33	45	57	57	67	69	58	44	44	50	59	60	65	66	70	55	40	40	40	40	..	..	..	50.5
	Minimum	41	40	30	30	36	36	28	18	17	10	30	30	33	46	42	31	17	16	18	16	18	37	33	40	31	29	15	15	..	..	..	27.8
Spencer§	Maximum	60	60	34	44	51	41	32	30	30	45	58	56	67	69	44	47	40	50	58	63	68	68	72	46	35	42	41	40	..	..	..	49.7
	Minimum	38	41	32	29	30	36	28	18	12	9	19	31	32	50	44	18	16	21	15	16	19	35	35	42	32	29	16	15	..	..	..	27.1
Union§	Maximum	55	58	34	45	44	40	45	25	33	46	55	56	59	65	50	46	56	51	58	60	64	65	63	52	34	38	46	44	..	..	..	49.5
	Minimum	28	41	30	30	29	28	26	13	13	11	13	24	31	34	36	29	20	24	20	28	35	42	38	45	31	28	23	21	..	..	..	27.5
Williamson§	Maximum	58	54	36	53	51	39	34	28	36	49	58	55	65	65	51	41	46	50	56	58	60	69	66	42	34	41	39	40	..	..	..	49.2
	Minimum	35	43	32	32	35	36	30	19	19	19	19	25	32	32	45	33	23	22	22	24	25	26	41	42	32	30	21	22	..	..	..	29.1

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

OF THE
UNIVERSITY OF ILLINOIS
10 MAY 1915

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MARCH, 1915

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
APRIL 30, 1915

Departure of the Mean Temperature from the Normal, March, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

Vol. XXIII. Parkersburg, W. Va., March, 1915. No. 3.

GENERAL SUMMARY.

The past month was the coldest March of record, with an average State temperature of 34.4°. Although the coldest of record, the month was free from unusually cool periods, the temperatures from day to day being exceptionally uniform. The highest temperature recorded, 63°, was 12° lower than the State maximum for any previous March of record, while lower temperatures occurred in March in 16 of the 25 years. The precipitation was also the lightest of record for March, except in 1893 and 1910, with favorable distribution. The snowfall, however, was slightly above the March average. The conditions were exceptionally favorable for fruit, but farm work was retarded by the unseasonably cool weather.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.05 and 30.04 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.43 inches on the 4th, and 29.67 inches on the 16th. Elkins, 30.43 inches on the 4th, and 29.60 inches on the 16th.

TEMPERATURE.

The monthly mean for the State, 49 stations reporting, was 34.4°. The mean departure from the normal for 42 stations having ten or more years of record was minus 9.1°. The daily averages were below the normal for the entire month, except the 4th and 5th, when they were only practically normal. The departures were not marked, however, on the 10-11th, 14-16th, and 24-25th, when the highest readings were general. The lowest readings occurred on the 1st, 4th, 13th, and 26th-31st. As a rule, the temperatures were below freezing from 25 to 27 days.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 77 per cent; 8 p. m., 64 per cent. The March averages for the same hours for the past 26 years are 80 and 70 per cent, respectively. Elkins, 8 a. m., 83 per cent; 8 p. m., 65 per cent. The March averages for Elkins for the same hours for the past 14 years are 83 and 71 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 58 stations reporting, was 1.61 inches. The departure from the normal for 48 stations having ten or more years of record was minus 2.43 inches. Light to moderate rain or snow occurred daily in most sections from the the 5th to the 8th and on the 16th and 17th, and scattered light showers or light snows from the 19th to the 26th. The heaviest precipitation was recorded on the 5th, 16th, and 19th.

RIVERS.

Owing to light precipitation and cool weather, the rivers and streams were exceptionally low for the season during the entire month. The average stage of Ohio river at Parkersburg, 9.0 feet, was 2.1 feet lower than the average for any previous March of record, and higher stages occurred at Parkersburg in every other March of record, except in 1911.

WIND.

The average wind velocity at Parkersburg was 6.5 miles per hour, or 0.8 miles below the March average for the past 25 years. The average at Elkins was 4.7 miles per hour, or 0.9 of a mile below the March average for 15 years. The highest velocity at Parkersburg was 27 miles per hour from the northwest on the 29th, and at Elkins 22 miles per hour from the southeast on the 5th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 47 per cent of the possible amount, or 9 per cent above the March average for 17 years. The average at Elkins was 35 per cent, or 2 per cent below the March average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bayard, 16th and 20th; Davis, 22nd; Grafton, 16th; Mannington, 21st; Philippi, 16th, 20th and 21st; Wheeling, 14th and 15th.

Halo, lunar: Elkins, 30th; Ryan, 1st.

Halo, solar: Bayard, 30th: Lewisburg, 30th; Ryan, 18th, 28th and 30th; Upper Tract, 27th; Wellsburg, 13th.

Haze: Bayard, 3d, 4th, 25th and 31st.

Sleet: Bayard, 16th; Davis, 5th; Holcomb 5th, 19th and 20th; Marlinton, 5th; Nuttallburg, 5th; Powellton, 5th and 19th.

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in inches.
1891	34.9	..	....	4.91	....
1892	36.1	87	8	3.50	....
1893	40.7	84	3	1.49	....
1894	45.8	88	1	1.94	....
1895	39.6	90	0	3.05	....
1896	36.1	76	−10	4.45	....
1897	46.1	81	12	3.60	....
1898	48.5	86	9	3.43	....
1899	42.5	76	0	5.82	4.5
1900	38.5	78	− 5	3.79	14.7
1901	42.9	83	−11	3.23	2.3
1902	43.4	80	− 5	4.30	15.0
1903	51.3	87	13	4.47	0.2
1904	43.8	86	7	4.12	1.9
1905	46.6	88	− 2	4.10	0.7
1906	37.3	75	− 7	4.77	13.4
1907	49.6	94	2	4.77	4.2
1908	47.8	89	15	6.04	1.1
1909	40.8	83	10	3.38	4.7
1910	49.5	90	5	0.55	1.1
1911	40.5	90	− 5	3.30	5.2
1912	39.9	80	6	5.02	5.1
1913	45.7	89	− 3	4.53	2.7
1914	37.3	83	−13	3.03	17.7
1915	34.4	63	7	1.61	6.7
Entire period	42.4	94	−13	3.81	6.0

Climatological Data for March, 1915.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	28.8	−9.7	48	25	7	4 †	37	1.91	−2.66	0.52	16.3	13	9	11	11	w.	Solomon Clark
Burlington	Mineral	875	20	34.8	−6.7	59	25	13	4	37	1.10	−2.00	0.40	10.0	4	13	14	4	nw.	J. W. Vandiver
Franklin	Pendleton	641	8	31.1	.....	42	10 †	15	4	23	.....	.....	.....	.....	.....	13[a]	8[a]	9[a]	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	1.01	−2.30	0.89	5.2	2	.....	.....	.....	w.	S. W. Lightner
Lost City	Hardy	.....	8	32.2	.....	50	25 †	16	4 †	29	0.70	.....	0.50	7.0	2	9	12	10	w.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	37.6	−3.5	59	25	21	4 †	33	0.82	−2.42	.....	5.5	3	22	5	4	w.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John C. Fisher
Romney	Hampshire	824	17	37.7	−5.1	61	25	16	4 †	38	0.60	−2.46	0.40	4.0	2	9	12	10	nw.	Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	33.7	−10.1	57	25	12	4	36	0.55	−1.94	0.20	1.2	4	16	6	9	.....	J. M. Mallow
Averages and	Extremes	.....	.....	34.1	−7.0	61	25	7	4 †	38	0.96	−2.30	0.89	7.0	4	13	10	8	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	36.0	−8.0	55	14	17	30	29	1.82	−2.52	0.80	8.0	7	19	3	9	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	2.08	.....	1.00	2.3	4	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	32.9	−9.0	53	15	15	4 †	34	1.68	−2.75	0.50	8.0	9	13	4	14	.....	H. A. Darnall
Cairo[d]	Ritchie	674	12	37.3	−8.7	58	14 †	15	6 †	36	1.80	−2.27	0.60	3.0	8	11	3	13	.....	Van A. Zevely
Central Station[j]	Doddridge	950	12	33.8	−9.1	54	14 †	12	.....	38	1.24	−1.71	0.39	.....	....	6	6	9	.....	G. W. Sherwood
Cheat Bridge	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	2.34	.....	0.50	.....	14	.....	.....	.....	.....	Franz A. Degler
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	1.80	.....	0.40	14.0	7	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	37.3	−6.9	61	14	16	1 †	40	1.54	−2.28	0.72	0.5	9	8	7	16	w.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	2.26	.....	0.65	12.5	.....	.....	.....	.....	.....	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	1.32	.....	0.72	.....	4	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	31.2	−7.9	51	4	13	4	33	1.69	−2.38	0.53	14.8	16	3	13	15	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	34.1	−8.6	59	14	14	30	40	1.34	−2.74	0.54	2.0	9	15	2	14	w.	F. P. Hall
Glenville	Gilmer	738	25	36.0	−8.2	57	14	16	13	36	1.25	−2.93	0.41	4.5	6	13	0	18	s.	M. T. Brannon
Grafton	Taylor	1,000	22	33.7	−9.4	62	14	15	27	40	0.72	−3.45	0.16	4.0	9	13	5	13	nw.	Joseph Gerken
Lost Creek	Harrison	1,026	18	33.8	−9.7	56	14	12	27 †	36	0.75	−3.53	0.30	4.0	5	13	4	14	w.	Allen Smith
Mannington	Marion	974	12	33.4	−10.6	53	14 †	13	30	33	1.43	−2.52	0.31	7.0	14	9	7	15	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	33.6[a]	−9.0	52	14	16[a]	27 †	28[a]	0.59	−3.30	0.32	2.0	5	6	5	20	nw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	31.4[a]	−13.1	45[a]	14 †	16	13 †	29[a]	1.28	−2.45	0.67	....	5	14	6	11	nw.	M. Z. White
New Cumberland	Hancock	987	15	32.7	−7.9	55	14	12	1 †	35	1.28	−2.25	1.00	T.	2	12	2	17	n.	Frank S. Evans
New Martinsville	Wetzel	634	21	36.0	−7.9	58	14	17	30	32	1.28	−2.54	0.30	T.	9	13	2	16	n.	Wm. Ankrom
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. T. Dohmer
Parkersburg	Wood	638	26	35.4	−7.0	53	14	18	30	25	1.42	−2.40	0.74	3.0	6	11	7	13	nw.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	31.1	−9.3	52	26	8	30	38	3.20	−1.17	0.60	23.0	14	7	9	15	.....	J. W. Swisher
Philippi	Barbour	1,149	22	33.6	−9.6	52	14 †	14	4	35	1.81	−2.49	0.37	9.6	16	13	9	9	nw.	J. D. Dadisman
Pickens	Randolph	2,697	24	30.6	−9.4	54	14	10	1 †	41	4.32	−1.07	0.64	31.0	14	8	12	11	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	1.76	−2.52	0.56	7.6	13	.....	.....	.....	ne.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	1.64	.....	0.80	.....	7	.....	.....	.....	e.	J. O. Goodman
Smithfield	Wetzel	835	10	39.8	.....	62	23	12	4 †	47	1.47	−2.88	0.45	5.0	7	18	5	8	w.	G. M. Whisler
Terra Alta	Preston	2,612	14	28.9	−11.1	48	5 †	8	31	31	3.68	−1.53	0.80	29.0	10	.....	.....	.....	.....	H. C. Shaffer
Wellsburg	Brooke	1,225	20	31.9	−7.8	51	14	13	30	26	1.48	−1.95	0.64	3.7	7	12	10	9	w.	C. P. Waugh
Weston	Lewis	1,026	26	34.1	−10.3	52	15 †	16	27 †	32	2.24	−2.25	0.60	11.4	12	12	6	13	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	35.7	.....	62	14	17	1 †	44	1.18	−1.93	0.62	0.6	8	10	2	19	w.	Miss M. B. Forsyth
Averages and	Extremes	.....	.....	34.0	−9.1	62	14 †	8	30 †	47	1.75	−2.40	1.00	8.4	9	11	6	14	w.	
Southern Section.																				
Bancroft	Putnam	574	11	35.6	−9.8	60	25	18	1 †	37	1.97	−1.99	0.70	1.2	8	17	0	14	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	36.9[i]	−6.1	61	1 †	15	13 †	42	0.75	−2.97	0.40	4.5	3	16	2	13	w.	John A. Ewart
Bluefield	Mercer	2,558	20	34.8	−9.3	55	25	18	18	32	0.90	−3.03	0.25	9.0	6	12	11	8	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	39.2	−10.6	62	25	19	13	38	2.02	−2.28	0.60	1.0	10	13	3	15	w.	R. C. Hewes
Clay	Clay	706	0	35.1[a]	.....	59[a]	25	14	18	37[a]	2.40	.....	0.65	2.0	7	11	9	11	.....	Prof. E. H. Knabenshue
Cuba	Jackson	650	14	35.4	−9.4	58	14	14	30	59	0.53	−3.06	0.45	1.0	2	10	14	7	nw.	C. T. Perry
Dunlow	Wayne	717	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	36.2	−10.2	55	25	19	18	30	2.31	−2.14	0.59	7.6	12	17	9	5	w.	J. J. Lincoln
Evans	Jackson	606	0	.....	.....	.....	.....	.....	.....	.....	1.55	.....	0.93	2.0	8	11	1	19	.....	B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	33.9	−9.8	59	25	13	13	40	1.40	−2.18	0.40	8.0	5	12	1	18	n.	W. H. Gwinn
Hinton	do	1,450	25	34.8	−10.2	63	25	17	13 †	39	1.99	−2.03	0.56	9.0	13	11	2	18	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	31.4	.....	53	15	12	1 †	40	1.93	.....	.....	16.5	...	11	3	17	.....	R. E. Ferguson
Huntington	Cabell	538	19	37.0	−8.1	60	25	21	30	31	2.46	−2.04	1.42	0.4	9	18	0	13	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	33.4	−9.8	57	25	17	4 †	36	0.84	−3.19	0.37	6.0	4	11	3	17	nw.	Geo. T. Argabrite
Logan	Logan	687	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. J. E. McDonald
Madison	Boone	704	9	37.2[g]	.....	62[f]	17 †	20	2 †	40	2.66	.....	0.80	4.5	9	15[l]	1[l]	9[l]	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	29.0	−10.7	50	25	9	13	35	1.33	−2.66	0.73	6.0	5	5	21	5	nw.	S. L. Brown
Nuttallburg	Fayette	2,252	22	30.1	−12.0	50	25	11	4	30	1.30	−2.57	0.60	10.0	5	10	12	5	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	36.8	−8.9	58	14	14	30	39	1.68	−2.44	0.70	T.	10	15	2	14	nw.	W. D. Holmes
Powellton	Fayette	933	17	38.6	−7.5	61	25	20	13	35	2.55	−2.13	0.98	3.2	8	9	13	9	.....	F. L. Evans
Robertsburg	Putnam	574	14	34.6	−11.3	57	25	15	31	36	1.67	−2.43	1.13	0.5	6	16	2	13	n.	E. C. Brace
Ryan	Roane	700	11	34.0	−11.2	58	25	13	13	39	1.44	−2.79	0.70	4.8	12	10	7	14	.....	Wm. E. Ryan
Spencer	do	784	16	35.6	.....	59	18	13	13	39	0.86	−2.81	0.58	0.8	3	9	11	11	.....	A. M. McKown
Sutton*	Braxton	839	11	36.2[b]	.....	59[e]	14	17[h]	13 †	35[c]	0.90	−3.06	0.30	3.0	6	10	11	10	.....	Ben Gillespie
Union	Monroe	2,250	10	34.2[a]	−9.9	60[a]	25	14	13	38[a]	0.79	−3.07	0.20	5.5	5	.....	.....	.....	.....	Shelton Clark
Williamson	Mingo	660	13	35.5	−12.5	57	15 †	19	2 †	36	2.20	−2.38	0.76	T.	10	15	3	13	w.	J. F. Keyser
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Averages and	Extremes	.....	.....	34.9	−9.9	63	25	9	13	42	1.64	−2.51	1.42	4.5	7	12	6	13	w.	
State Averages and	Extremes	.....	.....	34.4	−9.1	63	25	7	4 †	47	1.61	−2.43	1.42	6.7	8	12	7	12	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for March, 1915.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac					T.	.52	.08	.10	T.		T.	.05			T.	.15	.10		.16	.20	.05	T.	.20	T.	T.	.15	T.		.05	.10		1.91
Burlington	do					.30	.30		T.			T.					.10			.40	T.											1.10
Franklin	do																																
Harpers Ferry	do						.89		T.												.12											1.01
Lost City	do					.50			T.	T.	T.									.20			T.									0.70
Martinsburg	do					*	.74													.08						T.						0.82
Moorefield	do																																
Romney	do						.40										T.	T.		.20												0.60
Upper Tract	do					.20	.15	T.									T.			.10		.10										0.55
Northern Section.																																	
Bens Run	Ohio					.67	.14	.04												.80	.10		.02			.05						1.82
Brandonville	Monongahela				.60															T.				.18	.30	1.00						2.08
Buckhannon	do					.50	.30	.05	.10			T.				T.		T.		.20	.10	.15	.10	.18			T.					1.68
Cairo	Little Kanawha					*	.53	.10									.03			.30	.60		.15				.09					1.80
Central Station	Middle Is. Creek					.39	.23	.02	.05			T.	T.			T.	T.			.34	.11	T.	*	*	*	*	*	*	.10	*	*	T.	1.24
Cheat Bridge	Monongahela	T.				.50	.40	.20	.30	.20				.20		T.		.10					.10	.05	.08	.03			.04	.08	.06		2.34
Cortland	do					.30			.20									.20			.40			.20			.40			.10		1.80
Creston	Little Kanawha					.22	.50	T.	.10	T.						.05	T.	T.		.02	.30	.25	T.	.05	T.		.05	T.				1.54
Davis	Monongahela						.14	T.	.10	.20	*	*	*	*	*	*	*	.47	T.		.25		T.	.25			.65			.10	.10		2.26
Elizabeth	Little Kanawha						.72													.12	.40							.08				1.32
Elkins ***	Monongahela	T.				.53	.03	.12	.13	T.		.07	.05			.01	.14	T.		.15	.06	.02	.15	.04	T.	.02	.11		T.	.06	T.		1.69
Fairmont	do						.54	.07	.07	T.			.05				.05	T.			.39	.01	T.	.07	T.	T.	.09	T.			T.		1.34
Glenville	Little Kanawha					.41	T.	.20	T.								.17	T.		.17	.20	T.	T.	010			T.					1.25
Grafton	Monongahela					.16	.06	*	.10				.10							.14	.06			.04			.06					0.72
Lost Creek	do					.30	T.	.05	T.			T.	T.			T.	T.	T.		.24	.10	T.	T.	.06		T.	T.					0.75
Mannington	do					.31	.28	.04	.06			.03	.03			T.	.02	T.		.31	.07	.03	.01	.08		.12	.04		T.	T.			1.43
Morgantown	do					.32	T.	T.	.95											.15			.02	.05		T.						0.59
Moundsville	Ohio						.67		.05												.27			.09			.20					1.28
New Cumberland	do					1.00	T.	.28				T.				T.			T.	T.			T.			T.					T.	1.28
New Martinsville	do					.30	.20	.05	T.			T.					.05			.30	.12	T.	T.	.10		.13	.03				T.	1.28
Parkersburg ***	Ohio					.74	T.	.01	T.			T.				T.	T.	T.		.64	T.	T.	.01	T.	T.	.01	.01					1.42
Parsons	Monongahela					.30	.60	.40				.20	.20				T.			.40	.10	.10	.20	.40	.05	.10	.10			.05			3.20
Philippi	do					.37	.29	.02	.18			.08	.03			.03	.05	.02		.32	.12	.01	.03	.10	T.	.05	.11						1.81
Pickens	do					.64	.36	.20	.60			.20	.10				.32			.20	.50	.30	.20	.40	T.		.20			.20			4.32
Rowlesburg	do						.56	.30	.04				.06				.04	.02	.02		.40			.20	.02		.06	.02			.02		1.76
Saint Marys	Ohio					.05	.75	.04												.05	.50			.20				.05					1.64
Smithfield	Fishing Creek						.29	.45	.18	.05							T.			.25	.20											.05	1.47
Terra Alta	Monongahela							.20	.40							.26	.32			.60		.20	.40	.80			.40			.10			3.68
Wellsburg	Ohio					.64	.12	.15				T.				T.	.10			.10			T.	.25		.12				T.			1.48
Weston	Monongahela					T.	.60	.12	.10	.04			.04				.18	T.	T.		.46	.18	.06	.26	.02		.18	T.		T.	T.		2.24
Wheeling	Ohio						.62	.01	.04	T.			.03				T.	T.		T.	.20	T.		.07			.20	T.		.01	T.		1.18
Southern Section.																																	
Bancroft	Great Kanawha					.70	.20		.08								.46			.05	.30			T.	T.		.13			.05			1.97
Beckley	do					.05	T.	.30	.40																								0.75
Bluefield	do					.15			.10									.20			.10	.10	.25										0.90
Charleston	do					.60	.16	.08	.18	T.							.22	.40		.12	.08	T.	T.	T.			.10	.08					2.02
Clay	do					.65	.20	.35	.20				T.				.60	T.		T.	.20	T.		T.			.20						2.40
Cuba	Sand Creek					.43		T.	T.			T.				T.				.10		T.	T.	T.			T.						0.53
Dunlow	Big Sandy																																
Elkhorn	do					.59		.30	.40								.05	.20	T.	.04	.09	.02	.55	.02	.04	.01							2.31
Evans						.93	T.	.10	.03							T.	.03			.28	.03	.07				.08							1.55
Green Sulphur Spgs.	Great Kanawha					.30	T.	T.	.40								.20	.30		.20				T.	T.	T.							1.40
Hinton	do					.52	.56	.02	.12	.01							.16	.32		.08	.02	.08	.04	.02			.04						1.99
Holcomb	do					*	*	*	.88			*	.04				.28	.05		*	*	*	*	*	.43		*	.05		.20			1.93
Huntington	Ohio					1.00	.42	T.	.14								.02	.36		.18	.08	.08					.18	T.					2.46
Lewisburg	Great Kanawha					.37	T.	.10	T.								.07			.30	T.	T.	T.										0.84
Logan	Guyandotte																																
Madison	Great Kanawha					.80	.20	.10	.21									.55	.30			.05					.35	.10					2.66
Marlinton	do					.25	.05	T.	T.	T.		T.	T.				.73	T.	T.	.25	T.	T.	T.	T.	T.	T.	T.			.05	T.		1.33
Nuttallburg	do					*		.30	.60								.30	T.				.10										1.30
Point Pleasant	Ohio					.40	.70		.06								.02			.10	.28	.01		.01			.04	.06				1.68
Powellton	Great Kanawha					.78	.08		.20								.98	.06		.10			.12				.23					2.55
Robertsburg	do					.78	.35	T.	.07									.08		T.	.25						.14	T.				1.67
Ryan	do					.70	.01	.10	.02			T.				T.	.17	T.		.33	.02	.01	.02	.02		T.	.03			.01			1.44
Spencer	Little Kanawha					.58	.20	.08	T.														T.	T.		T.	T.						0.86
Sutton	Great Kanawha					.10	T.		.10								.20			.10				.10		.30						0.90
Union	do					.10			.20							T.	.15	T.	.15	T.	T.	T.	T.	T.		.19							0.79
Williamson	Big Sandy					.66	.10	T.	.06	T.							.48	.40		.08		.18	.04	.02			.18	T.					2.20

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

Daily Temperatures for March, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	30	38	35	40	39	39	38	30	34	40	40	42	44	44	47	41	35	39	38	38	35	34	31	37	48	41	37	40	39	36	34	38.2
	Minimum	12	23	19	7	28	25	26	22	12	24	27	17	7	15	20	29	16	28	16	23	22	14	26	29	30	27	8	13	19	9	13	19.5
Burlington	Maximum	38	46	41	43	40	36	42	38	42	48	43	39	51	52	55	44	40	47	38	43	45	43	48	49	59	50	46	48	49	41	43	44.7
	Minimum	17	30	27	13	29	28	24	28	24	27	27	25	14	21	25	34	24	20	22	25	28	22	35	37	29	28	25	30	26	15	17	25.0
Lost City	Maximum	32	42	38	40	36	42	41	42	34	42	40	35	46	32	40	36	32	38	48	46	40	36	40	42	50	50	48	45	42	38	40	40.4
	Minimum	20	18	28	16	30	29	22	24	20	31	32	23	17	16	18	20	16	19	22	26	28	26	32	34	35	32	25	18	32	18	18	24.0
Martinsburg§	Maximum	41	49	49	46	39	37	45	43	46	51	45	43	55	57	57	49	43	51	44	48	48	43	52	50	59	46	46	54	50	45	47	47.7
	Minimum	22	23	27	21	22	30	31	32	24	25	34	26	22	25	29	32	26	25	25	31	31	28	34	39	34	38	21	21	27	21	22	27.4
Moorefield	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Romney	Maximum	40	50	49	45	44	37	46	43	44	50	56	54	55	60	58	55	48	51	51	46	50	45	55	51	61	56	44	53	50	45	45	49.6
	Minimum	20	30	27	16	30	28	25	30	23	29	25	16	22	26	25	30	23	26	24	30	28	30	35	37	30	37	17	17	28	18	18	25.8
Upper Tract	Maximum	37	45	40	45	40	40	46	36	37	39	46	38	47	52	54	48	37	48	45	44	40	38	38	42	57	50	51	48	46	42	41	43.6
	Minimum	17	30	28	12	28	25	25	29	20	24	33	26	14	20	20	34	25	19	21	27	26	22	24	33	27	23	15	15	34	20	21	23.8
Northern Section.																																	
Bens Run	Maximum	43	46	43	46	44	45	38	41	46	47	43	44	54	55	51	48	43	47	39	39	42	38	39	46	52	45	46	48	45	44	38	44.7
	Minimum	19	27	24	19	36	35	32	30	23	28	30	25	26	26	27	32	25	23	31	32	27	28	33	36	33	26	24	21	28	17	21	27.2
Buckhannon	Maximum	34	44	40	45	45	44	34	36	40	47	40	31	45	50	53	42	40	44	40	36	40	36	35	42	52	50	50	47	43	37	43	42.1
	Minimum	18	20	25	15	35	34	29	23	22	23	28	25	15	22	24	35	22	18	25	30	22	18	28	32	26	30	16	18	26	15	16	23.7
Central Station	Maximum	46	44	44	44	44	43	38	37	48	50	45	45	51	54	51	47	45	46	41	35	41	..	..	..	..	..	..	..	..	..	..	44.7
	Minimum	14	18	22	14	33	33	30	29	18	21	26	26	13	20	23	33	20	19	24	30	13	..	..	..	..	..	..	..	..	..	..	22.8
Creston	Maximum	45	53	49	49	46	43	41	39	49	57	49	51	57	61	54	47	47	51	44	40	46	44	40	48	55	49	50	54	51	47	53	48.7
	Minimum	16	18	26	19	35	33	31	31	22	23	27	31	26	21	25	31	25	17	26	33	28	21	30	36	25	33	26	27	29	17	16	25.9
Elkins	Maximum	33	41	37	51	40	41	35	32	36	45	34	36	47	49	49	43	33	43	36	38	37	31	32	38	50	40	39	43	41	37	39	39.5
	Minimum	17	25	22	13	34	22	29	23	20	28	28	21	14	22	23	28	20	21	22	26	22	18	29	32	31	21	13	17	24	15	16	22.8
Fairmont§	Maximum	42	46	45	50	44	43	38	38	47	51	43	45	54	59	54	45	43	48	37	35	46	37	37	44	53	42	47	49	45	47	40	45.0
	Minimum	17	18	24	16	18	33	31	28	21	22	24	20	18	19	26	36	22	22	25	29	22	22	23	33	30	33	15	18	24	14	17	23.2
Glenville	Maximum	41	48	49	49	50	49	40	38	45	51	49	49	52	57	56	56	44	47	49	38	41	40	39	45	55	47	46	49	48	46	41	46.9
	Minimum	19	20	25	20	33	36	31	23	21	22	22	28	16	22	24	36	23	19	26	32	26	22	32	34	35	34	17	19	22	18	17	25.0
Grafton	Maximum	40	42	41	47	46	44	38	36	43	47	46	40	46	62	61	46	44	42	41	36	39	38	36	35	45	44	38	44	44	39	39	42.9
	Minimum	20	21	24	16	31	35	21	29	24	31	23	18	27	22	25	35	24	28	21	33	23	23	32	23	28	31	15	18	25	16	17	24.5
Lost Creek	Maximum	41	47	41	45	45	43	36	37	44	51	44	43	49	56	52	44	44	47	41	34	41	37	36	44	53	45	44	48	45	43	45	44.0
	Minimum	17	22	27	18	35	36	31	29	19	23	24	25	13	20	22	33	19	21	22	30	17	19	31	34	30	32	12	15	27	12	14	23.5
Mannington	Maximum	39	42	41	44	43	43	40	37	45	51	45	41	48	53	53	47	45	45	42	35	43	37	37	43	52	44	43	49	45	41	39	43.6
	Minimum	17	21	24	14	34	33	31	29	20	20	26	22	15	21	24	34	21	16	23	31	17	22	32	34	27	30	14	17	24	13	16	23.3
Morgantown	Maximum	36	40	39	45	40	41	35	34	40	45	40	38	45	52	51	43	38	44	39	35	37	34	36	42	51	42	42	47	42	41	35	40.9
	Minimum	17	26	21	18	35	33	33	28	23	26	29	..	17	24	32	36	26	23	28	33	24	24	30	34	35	29	16	22	30	16	20	26.3
New Cumberland	Maximum	40	38	36	41	43	44	35	36	45	47	40	42	47	55	54	45	42	43	40	46	42	36	43	45	46	40	42	45	42	42	33	42.4
	Minimum	12	24	15	17	30	31	30	26	18	27	29	18	15	20	29	28	18	18	29	27	22	27	32	34	30	23	13	30	12	12	18	23.0
New Martinsville	Maximum	42	44	41	46	47	45	38	40	48	51	44	45	49	58	52	50	45	50	43	40	44	40	40	47	52	47	46	49	46	45	47	45.8
	Minimum	20	24	25	20	31	35	33	31	24	25	28	25	19	26	27	35	25	22	28	32	23	26	34	35	32	31	18	21	25	17	19	26.3
Parkersburg	Maximum	39	45	36	43	43	43	37	37	44	48	42	40	46	53	52	46	39	45	37	43	41	38	42	48	51	41	43	49	42	39	37	42.9
	Minimum	23	28	26	20	36	35	32	28	25	30	32	29	22	28	29	28	24	26	32	31	31	26	34	36	37	27	21	24	26	18	22	27.9
Parsons	Maximum	35	43	37	50	42	42	40	34	39	47	39	38	50	51	48	43	37	39	40	57	37	34	36	37	40	52	50	43	50	45	35	41.3
	Minimum	13	14	34	12	30	32	29	25	20	19	15	12	13	18	28	31	21	18	14	18	19	18	28	32	30	26	25	12	26	8	9	20.9
Philippi	Maximum	38	45	40	49	44	42	36	35	41	49	44	40	48	52	52	45	42	45	38	55	41	38	37	43	52	41	42	47	45	41	40	42.8
	Minimum	20	23	24	14	33	33	31	28	22	23	26	22	15	22	24	35	22	25	22	32	21	21	32	34	30	31	18	18	26	16	15	24.4
Pickens	Maximum	40	46	39	47	42	42	32	27	34	44	42	54	44	54	45	44	47	46	32	32	37	30	38	37	45	36	44	46	50	38	41	40.6
	Minimum	10	18	22	12	34	30	25	21	17	23	27	20	15	13	25	28	12	20	22	15	18	10	24	28	25	27	10	16	28	15	25	20.5
Terra Alta	Maximum	32	39	38	42	48	45	40	38	38	42	38	38	35	40	48	46	40	47	48	43	40	39	37	39	42	36	34	46	47	39	34	40.6
	Minimum	11	20	15	12	18	16	18	20	15	17	16	18	16	16	22	27	10	17	26	22	16	18	25	20	22	18	10	16	16	12	8	17.2
Wellsburg	Maximum	35	40	34	40	39	43	36	31	40	38	38	36	43	51	50	41	36	41	38	40	40	35	40	42	48	40	38	43	39	38	33	39.5
	Minimum	15	25	15	16	32	31	29	25	20	30	30	19	18	25	34	28	19	21	26	29	25	27	31	34	34	25	16	24	15	13	21	24.3
Weston§	Maximum	40	46	41	44	45	44	38	34	44	50	40	42	46	50	52	48	44	46	48	40	42	36	40	50	52	40	44	48	34	40	44	43.6
	Minimum	18	20	26	18	26	34	32	28	22	24	30	27	17	18	20	36	30	22	24	30	23	20	30	32	30	32	16	18	28	16	17	24.6
Wheeling§	Maximum	45	46	41	46	45	47	37	42	51	54	43	46	53	62	55	55	48	47	42	47	45	41	45	48	56	42	52	51	42	49	38	47.2
	Minimum	17	17	22	21	21	33	31	30	22	23	27	22	18	18	25	31	23	20	25	23	24	27	28	35	36	31	17	18	20	17	18	24.2
Southern Section.																																	
Beckley	Maximum	61	60	58	57	61	50	40	38	39	45	..	..	..	..	..	..	..	..	..	44	42	42	57	51	60	61	55	58	60	41	49	51.3
	Minimum	31	32	31	29	19	32	24	21	22	24	20	21	15	16	15	21	19	20	19	20	21	29	29	29	22	21	19	19	19	22	18	22.5
Bluefield§	Maximum	45	45	45	46	42	45	43	40	49	45	45	43	51	52	53	49	38	41	43	40	38	35	38	42	55	52	40	44	49	46	45	44.6
	Minimum	20	22	27	23	28	26	24	25	20	25	29	27	19	25	24	33	20	18	30	29	26	25	25	30	27	31	24	26	22	23	25	25.1
Charleston	Maximum	43	50	47	46	50	46	42	42	47	54	47	48	54	59	59	50	42	48	44	45	44	43	44	48	62	56	60	57	53	55	50	49.5
	Minimum	23	22	31	23	38	34	32	32	30	26	26	34	19	22	28	38	27	24	32	36	33	28	34	38	30	36	22	22	32	22	21	28.9
Elkhorn	Maximum	41	44	45	48	46	44	42	34	40	48	48	42	50	50	53	52	42	40	42	41	36	34	39	44	55	54	40	48	48	48	47	44.7
	Minimum	25	23	30	24	32	31	30	29	25	26	31	30	20	22	26	34	23	19	30	31	30	30	28	32	28	33	27	23	34	26	28	27.7
Green Sulphur Spgs.	Maximum	39	46	46	48	42	43	37	35	39	48	45	44	53	54	54	47	40	44	42	40	42	41	39	44	59	50	44	51	50	44	43	44.9
	Minimum	19	17	17	16	30	29	28	26	21	24	23	24	13	17	20	33	22	16	23	31	25	24	28	31	20	31	18	16	32	19	16	22.9
Hinton§	Maximum	41	49	47	49	35	42	37	37	41	41	47	46	54	56	58	47	37	47	44	40	43	40	43	47	63	42	45	54	54	45	50	45.8
	Minimum	20	20	21	20	21	31	32	29	22	24	26	30	17	17	21	23	25	19	20	30	28	27	28	31	24	26	23	19	20	23	23	23.9
Holcomb§	Maximum	36	45	42	49	42	46	43	31	37	40	47	41	52	44	53	44	33	45	38	38	33	37	33	40	55	37	47	35	45	40	45	41.7
	Minimum	12	14	22	14	18	28	28	28	20	21	25	28	12	25	28	29	20	15	25	23	20	16	22	27	20	25	17	26	16	17	16	21.2
Huntington§	Maximum	41	48	41	42	45	44	38	41	46	50	46	45	49	54	56	42	41	47	45	45	45	41	44	48	60	41	45	52	48	39	48	45.7
	Minimum	23	23	28	24	25	38	32	31	26	27	31	33	22	23	26	32	26	26	29	35	34	30	29	34	33	33	26	24	28	21	23	28.2
Lewisburg	Maximum	36	44	44	44	39	45	36	32	36	45	40	39	51	51	51	46	42	43	41	38	39	37	35	40	57	51	43	48	47	41	45	42.8
	Minimum	19	24	26	17	29	29	28	26	19	27	29	26	17	18	21	35	22	17	24	31	24	23	28	31	21	30	20	17	31	20	18	24.1
Madison§	Maximum	46	50	45	51	52	46	36	40	45	54	48	47	55	56	40	60	62	47	50	46	44	..	..	..	62	40	48	..	..	..	..	48.8
	Minimum	21	20	30	25	21	36	33	31	28	24	24	26	20	20	21	21	22	26	24	30	33	29	..	..	..	27	25	22	..	..	..	25.6
Marlinton	Maximum	30	38	36	40	34	40	34	30	30	39	33	32	44	45	43	42	36	38	34	34	35	32	32	36	50	40	39	42	40	38	40	37.3
	Minimum	16	18	22	10	28	29	28	25	18	23	28	22	9	16	17	30	20	12	17	26	22	18	26	29	18	26	16	10	30	18	12	20.6
Point Pleasant	Maximum	44	52	45	44	45	46	38	44	49	54	51	47	53	58	57	52	44	49	44	48	46	44	45	50	57	50	47	54	49	43	52	48.4
	Minimum	17	23	20	19	34	35	30	29	21	25	26	29	18	19	27	35	22	23	28	29	31	21	32	33	32	32	17	20	23	14	19	25.3
Powellton	Maximum	41	49	48	55	53	44	42	38	42	52	50	48	55	56	60	56	45	50	48	44	44	40	42	47	61	59	47	55	52	49	52	49.2
	Minimum	21	21	31	21	36	32	32	30	27	27	29	32	20	22	26	37	26	23	29	35	30	28	32	35	27	35	24	22	33	24	22	28.0
Robertsburg§	Maximum	40	45	42	45	45	42	35	39	45	50	45	45	50	55	55	44	40	45	40	45	45	40	43	45	57	42	53	50	45	47	45	45.3
	Minimum	16	18	21	20	21	32	30	29	24	25	20	30	16	19	22	29	24	21	27	30	31	21	24	33	27	35	18	24	25	16	15	24.0
Ryan	Maximum	40	48	43	44	47	43	39	35	15	50	45	45	45	56	55	44	40	45	36	40	44	40	41	45	58	48	46	51	47	39	47	44.9
	Minimum	14	15	19	20	35	31	31	30	21	19	21	28	13	17	23	37	24	17	24	32	28	20	31	30	22	28	15	16	31	14	14	23.1
Spencer§	Maximum	41	51	44	45	47	47	38	42	46	53	57	46	51	56	52	40	42	59	57	39	42	42	41	46	52	40	43	53	52	41	48	46.9
	Minimum	15	17	20	18	34	34	30	30	22	19	23	23	13	17	23	32	22	32	29	39	31	19	32	34	24	36	15	16	29	15	14	24.4
Union§	Maximum	40	47	46	45	35	38	41	35	38	47	46	44	50	53	45	40	43	41	40	41	38	41	57	58	60	50	48	49	48	50	..	44.5
	Minimum	19	23	28	21	27	28	29	30	21	20	30	29	14	16	30	23	18	21	21	22	21	28	31	20	26	32	16	17	26	19	36	23.9
Williamson§	Maximum	40	47	46	46	50	42	32	38	43	50	46	46	51	56	57	40	33	46	42	40	40	38	40	46	52	39	45	57	52	43	41	44.6
	Minimum	21	19	19	23	23	35	30	29	25	22	23	24	21	20	27	27	26	23	24	35	34	32	31	32	27	30	27	24	30	29	25	26.4

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

WE Stack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY
JUN 1 5 [illegible]

CLIMATOLOGICAL DATA

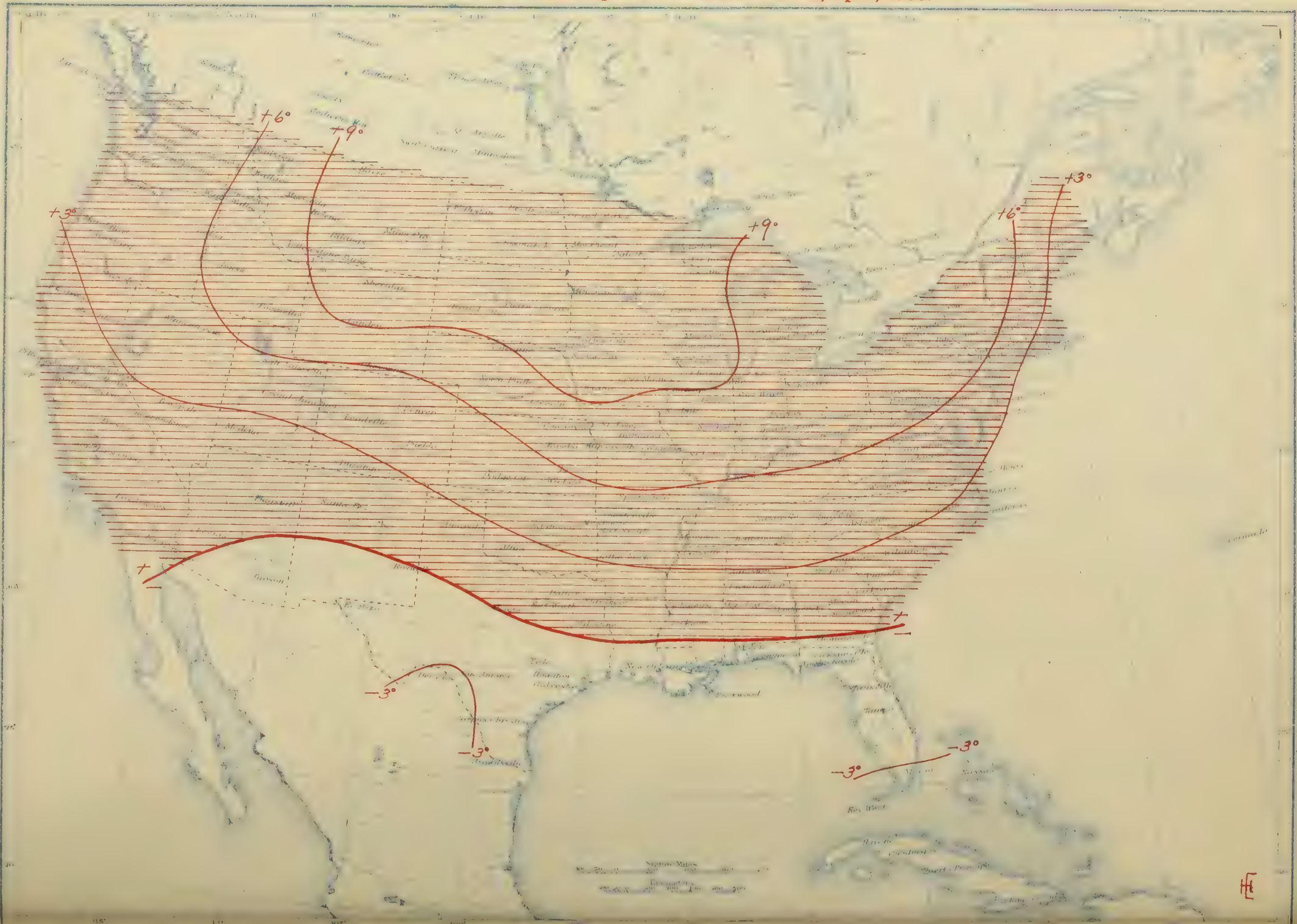
WEST VIRGINIA SECTION

APRIL, 1915

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MAY 28, 1915

Departure of the Mean Temperature from the Normal, April, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

Vol. XXIII. Parkersburg, W. Va., April, 1915. No. 4.

GENERAL SUMMARY.

The past month was the warmest April of record, except in 1896, and also the dryest April, except in 1899 and 1900. Although averaging abnormally warm, unseasonably cool weather prevailed until the 19th, except for a few days, and the season was about 10 days late at the close of the second decade. Record high temperatures for April were nearly equalled or exceeded during the middle of the last decade, when maximum readings from 90° to 95° were recorded in most sections. It was the third month with deficient precipitation, the amounts received during March and April averaging less than one-half the normal; but the month closed with a favorable crop outlook, owing to high temperatures and good showers during the last decade in April. The sunshine was considerably above the April average.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.10 and 30.12 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.46 inches on the 13th, and 29.63 inches on the 30th. Elkins, 30.44 inches on the 13th, and 29.56 inches on the 29th.

TEMPERATURE.

The monthly mean for the State, 44 stations reporting, was 55.5°. The mean departure from the normal for 37 stations having ten or more years of record was plus 3.7°. The first three days were exceptionally cool for the season, but warmer weather set in on the 4th and the temperatures were considerably above the normal from the 6th to the 11th. Slight minus departures occurred daily from the 12th to the 19th, with the night temperatures below freezing in most sections; but abnormally warm weather prevailed from the 19th to the 30th, especially from the 25th to the 27th, when the records for April were exceeded at many of the stations.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 69 per cent; 8 p. m., 51 per cent. The April averages for the same hours for the past 26 years are 75 and 63 per cent, respectively. Elkins, 8 a. m., 76 per cent; 8 p. m., 60 per cent. The April averages for Elkins for the same hours for the past 14 years are 80 and 64 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 54 stations reporting, was 1.93 inches. The departure from the normal for 46 stations having ten or more years of record was minus 1.72 inches. The precipitation was heaviest over the mountain sections, where the monthly amounts averaged about 2.50 inches, and lightest over the western half of the State and extreme eastern sections. Snow flurries or light snow occurred in many sections on the 3d. Light to moderate showers were general on the 10th, 11th, and 12th, and widely scattered light showers on the 16th, 17th, 20th, 21st, and 22d. Good rains were quite general on the 23d, 27th, 28th, and 29th.

WIND.

The average wind velocity at Parkersburg was 5.5 miles per hour, or 0.3 of a mile below the April average for the past 25 years. The average at Elkins was 3.9 miles per hour, or 1.2 miles below the April average for 15 years. The highest velocity at Parkersburg was 37 miles per hour from the northwest on the 20th, and at Elkins 26 miles per hour from the west on the 10th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 56 per cent of the possible amount, or 8 per cent above the April average for 17 years. The average at Elkins was 52 per cent, or 8 per cent above the April average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 14th, 20th, and 24th; Creston, 14th and 24th; Elkins, 14th, 24th, and 25th; Grafton, 24th, 25th, 26th, and 30th; Mannington, 24th and 25th; Marlinton, 25th; Rowlesburg, 8th, 10th, 14th, 24th, and 29th; Williamson, 14th, 21st, and 30th.

Hail: Bancroft, 9th; Bayard, 27th; Charleston, 11th; Elkins, 12th and 28th; Fairmont, 11th and 27th; Glenville, 27th; Lewisburg, 24th; Mannington, 12th; Morgantown, 27th, 28th, and 29th; Philippi, 27th; Romney, 26th and 28th; Rowlesburg, 29th; Smithfield, 28th; Wheeling, 28th.

Halo, solar: Wellsburg, 22d.

Smoke: Bayard, 9th, 21st, 22d, 24th, and 25th; Creston, 9th and 19th; Green Sulphur Springs, 19th; Holcomb, 7th, 8th, 9th, and 10th; Lost Creek, 5th and 9th; Mannington, 9th; Philippi, 9th.

Thunderstorms (dates and number of stations reporting): 9th, 8; 10th, 10; 11th, 10; 12th, 1; 16th, 1; 20th, 6; 21st, 3; 22d, 4; 23d, 9; 24th, 4; 25th, 2; 26th, 4; 27th, 13; 28th, 16; 29th, 11.

COMPARATIVE DATA FOR APRIL.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in Inches.
1891	52.0	..	....	2.81	....
1892	50.6	87	17	4.28	....
1893	53.4	92	20	5.18	....
1894	50.6	90	14	3.32	....
1895	52.9	90	17	2.93	....
1896	57.7	95	12	2.06	....
1897	51.5	90	19	2.97	....
1898	48.0	86	2	3.14	....
1899	53.4	93	18	1.84	0.5
1900	51.8	88	16	1.35	T.
1901	47.5	95	18	7.05	6.0
1902	49.8	96	21	3.06	10.0
1903	51.3	91	8	4.47	0.4
1904	47.7	82	12	3.15	1.3
1905	52.2	89	14	2.78	1.5
1906	54.1	92	15	3.16	0.3
1907	45.6	92	10	3.49	6.1
1908	54.8	92	18	4.30	0.3
1909	53.0	93	10	5.04	2.4
1910	53.2	91	16	3.39	0.6
1911	49.5	88	6	4.29	1.5
1912	55.4	88	20	4.03	0.2
1913	52.4	92	12	2.99	0.1
1914	52.1	93	16	4.63	0.2
1915	55.5	101	10	1.93	T.
Entire period	51.8	101	2	3.51	1.9

Climatological Data for April, 1915.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	50.0	+3.2	88	26 †	13	2	52	2.26	−1.96	0.53	T.	9	17	6	7	w.	Solomon Clark
Burlington	Mineral	875	20	54.8	+4.2	93	25	17	2	57	1.75	−0.85	0.85	0	4	9	20	1	w.	J. W. Vandiver
Franklin	Pendleton	641	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	5	8	.....	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	..	0.76	−2.21	0.55	0	3	.....	.....	.....	w.	S. W. Lightner
Lost City	Hardy	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. D. Hinegardner
Martinsburg	Berkeley	435	23	58.0	+6.8	94	25 †	23	1	47	0.93	−2.06	0.50	0	....	19	9	2	w.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John C. Fisher
Romney	Hampshire	824	17	57.6	+6.7	101	26	20	2	51	2.15	−0.50	0.60	0	8	.....	.....	.....	.....	Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	54.6[a]	+3.4	96[a]	26	16 [a]	2	55[a]	0.10	−2.36	0.10	0	1	21	9	0	w.	J. M. Mallow
Averages and	Extremes	.....	....	55.0	+4.9	101	26	13	2	57	1.32	−1.66	0.85	T.	5	16	10	4	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	56.8	+4.8	92	25 †	23	2	47	0.96	−3.38	0.40	0	6	18	9	3	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	2.62	.....	1.03	0	8	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	53.8	+2.9	88	26	18	2	45	4.06	−0.23	1.72	T.	9	12	11	7	.....	H. A. Darnall
Cairo	Ritchie	674	12	58.7	+4.1	95	26 †	21	4	60	1.61	−2.24	0.95	0	5	4[f]	17[f]	3[f]	.....	Van A. Zevely
Central Station	Doddridge	950	12	57.8	.....	90	25 †	.....	.....	49	0.93	−2.46	0.52	0	7	8	14	4	sw.	G. W. Sherwood
Cheat Bridge	Randolph	3,600	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Franz A. Degler
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	2.48	.....	0.62	0	8	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	58.0	+5.8	95	26	18	2	50	1.77	−2.41	0.65	0	9	10	3	17	sw.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	2.51	.....	0.55	T.	10	19	2	9	sw.	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	1.51	.....	0.75	0	5	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	51.8	+3.1	88	26	18	2	48	2.28	−1.01	0.63	T.	13	7	12	11	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	55.8	+3.7	95	26	20	2	52	1.74	−1.89	0.73	0	9	22	0	8	w.	F. P. Hall
Glenville	Gilmer	738	25	56.9	+3.8	94	26 †	20	2	50	1.89	−1.96	0.80	0	5	11	3	16	s.	M. T. Brannon
Grafton	Taylor	1,000	22	54.9	+3.4	94	26	19	2	52	1.86	−1.99	0.55	0	10	20	4	6	s.	Joseph Gerken
Lost Creek	Harrison	1,026	18	54.8	+5.1	92	26	15	2	50	1.76	−1.76	0.73	0	6	18	6	6	w.	Allen Smith
Mannington	Marion	974	12	53.7	+2.4	90	26 †	18	2	48	2.34	−1.90	0.94	0	8	13	6	11	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	56.1[e]	+4.9	88[b]	26	21 [e]	2	55[b]	2.91	−0.55	1.15	0	5	8	12	10	.....	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	.....	.....	.....	.....	21	1 †	....	1.30	−1.55	0.29	0	7	16	7	7	.....	M. Z. White
New Cumberland	Hancock	987	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. F. Smith
New Martinsville	Wetzel	634	21	57.0	+3.9	95	26	22	1 †	47	1.07	−2.52	0.35	0	6	14	7	9	s.	Wm. Ankrom
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. T. Dohmer
Parkersburg	Wood	638	26	57.3	+4.3	91	25	22	2	39	2.02	−0.89	0.89	0	9	13	6	11	n.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	51.2	+2.4	89	26 †	10	1 †	52	2.76	−1.19	1.68	1.0	6	12	13	5	.....	J. W. Swisher
Philippi	Barbour	1,149	22	54.4	+3.4	92	26	14	2	51	2.77	−1.31	1.29	T.	9	15	11	4	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	53.4[a]	+5.1	89[a]	25	17 [a]	2	49[a]	2.89	−2.30	1.32	1.0	8	16	8	6	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	1.98	−2.12	0.62	0	11	.....	.....	.....	.....	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	1.30	.....	0.70	0	4	.....	.....	.....	c.	J. O. Goodman
Smithfield	Wetzel	835	10	57.4	.....	97	26	27	18	49	2.36	−1.74	0.71	0	7	13	10	7	w.	G. M. Whisler
Terra Alta	Preston	2,612	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. C. Shafer
Wellsburg	Brooke	1,225	20	54.2	+5.6	86	26	25	4	55	1.48	−1.74	0.45	0	7	13	8	9	w.	C. P. Waugh
Weston*	Lewis	1,026	26	55.6	+3.2	90	26	18	2	46	2.72	−1.57	1.50	0	10	20	10	0	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	57.4	.....	99	25	22	1 †	55	2.50	−0.65	0.67	T.	9	13[a]	4[a]	12[b]	sw.	Miss M. B. Forsyth
Averages and	Extremes	.....	.....	55.6	+4.0	99	25	10	1 †	60	2.06	−1.72	1.72	0.1	8	14	8	8	w.	
Southern Section.																				
Bancroft	Putnam	574	11	56.0	+2.4	94	26	18	1	50	1.77	2.31	0.75	0	5	19	6	5	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	52.2	+3.1	85	22 †	19	2 †	50	5.69	+1.78	2.70	0	4	21	6	3	w.	John A. Ewart
Bluefield*	Mercer	2,558	20	55.8	+2.3	87	26 †	23	1 †	44	3.03	−0.38	1.95	0.5	4	15	9	6	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	59.2	+2.6	95	26	21	1	46	1.74	−1.95	0.66	0	10	17	1	12	w.	Miss Mary E. Hewes
Clay	Clay	706	0	56.4[a]	.....	94 [a]	26	21	3	51[a]	1.45	.....	0.50	0	4	18	7	5	.....	Prof. E. H. Knabenshue
Cuba*	Jackson	650	14	56.2	+3.9	94	25	16	2	51	1.10	−2.21	0.48	0	6	10	20	0	w.	C. T. Perry
Dunlow	Wayne	717	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	9	5	.....	L. A. Smith
Elkhorn	McDowell	1,933	22	55.4	+2.3	88	26	22	1	41	2.62	−0.90	1.05	0	5	16	10	4	w.	J. J. Lincoln
Evans	Jackson	666	0	.....	.....	.....	.....	.....	.....	.....	1.29	.....	0.42	0	6	11	3	16	.....	B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	53.6	+2.5	92	26	16	1	51	3.85	+0.63	2.32	0	6	18	5	7	w.	W. H. Gwinn
Hinton	do	1,450	25	55.2	+1.9	93	26 †	21	1 †	52	2.08	−1.22	0.98	T.	9	24	1	5	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	53.2	.....	91	26	17	1 †	49	2.51	.....	0.93	T.	7	17	1	12	.....	R. E. Ferguson
Huntington	Cabell	538	19	58.0	+4.7	92	26	23	30	43	2.03	−1.76	1.00	0	6	17	1	12	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	52.8	+2.7	88	28	17	4 †	46	2.13	−1.27	1.08	0	3	21	6	3	nw.	Geo. T. Argabrite
Logan	Logan	687	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. J. E. McDonald
Madison*	Boone	704	9	56.2	....	90 †	25	20 [a]	1	58[a]	4.02	.....	1.20	0	9	19[a]	8[a]	2[a]	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	48.4	+0.8	83	27	14	2	46	1.86	−1.33	0.55	0.5	9	10	18	2	sw.	S. L. Brown
Nuttallburg	Fayette	2,252	22	.....	.....	.....	.....	.....	.....	..	2.12	−1.20	0.80	0	7	7	14	2	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	57.2	+2.3	94	26	16	1	49	1.55	−1.82	0.52	0	9	15	6	9	se.	W. D. Holmes
Powellton	Fayette	933	17	60.2[f]	+6.0	95 †	26	22 [f]	1	47[f]	1.87	−1.98	0.73	0	5	11	17	2	.....	F. L. Evans
Robertsburg	Putnam	574	14	55.1	+2.0	92	25 †	16	1	50	1.15	−2.92	0.42	0	7	14	6	10	.....	E. C. Brace
Ryan	Roane	700	11	55.3	+2.8	90	26	14	1 †	53	0.93	−3.14	0.29	0	9	15	6	9	.....	Wm. E. Ryan
Spencer	do	784	16	56.3	.....	94	26	16	2	55	1.24	−2.27	0.67	0	3	7	17	6	.....	A. M. McKown
Sutton	Braxton	839	11	56.8[f]	.....	95 †	27	19 †	2	55[f]	1.05	−3.31	0.55	0	3	12	15	3	.....	Ben Gillespie
Union	Monroe	2,250	10	54.0[a]	+3.2	90 [a]	25 †	17	1	57[a]	0.69	−3.04	0.39	T.	3	.....	.....	.....	.....	J. C. Shanklin
Williamson	Mingo	660	13	58.2	+3.0	93	26	25	1 †	48	0.92	−3.34	0.46	0	8	18	5	7	w.	J. F. Keyser
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Averages and	Extremes	.....	..	55.4	+2.8	95	26 †	14	1 †	57	1.93	−1.74	2.70	T.	6	15	8	7	w.	
State Averages and	Extremes	.....	....	55.5	+3.7	101	26	10	1 †	60	1.93	−1.72	2.70	T.	7	15	8	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for April, 1915.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac	T.		T.			T.				.15	.52	.04	.21			T.				T.	.02	T.	.53				.51	.23	.05			2.26
Burlington	do									T.	.15	.35											.40	T.		T.		.85	T.				1.75
Franklin	do																																
Harpers Ferry	do											.10	.11									T.		T.						.55			0.76
Lost City	do																																
Martinsburg	do					T.				.10	.15	*									.13			.05				T.	.50				0.93
Moorefield	do																																
Romney	do						T.			.09	.25	.60	.11											.33	T.		.30	.37	.10				2.15
Upper Tract	do										T.													.10					T.				0.10
Northern Section.																																	
Bens Run	Ohio												.21				.10				.10		.05	.40					.10				0.96
Brandonville	Monongahela											T.	.40	.17				.07			.14			.30		.24		1.03	.27				2.62
Buckhannon	do			T.				T.			.30	.35	.10	.15			.12				T.	T.	T.	.95				.15	1.72	.22			4.06
Cairo	Little Kanawha												.10								.09	.33			.95					.14			1.61
Central Station	Middle Is. Creek					T.		T.			T.	.18	.04	.03			.03				T.	T.	T.	.52	T.				.08	.05			0.93
Cheat Bridge	Monongahela																																
Cortland	do										.40		.43									.03		.31				.15	.46	.62	.08		2.48
Creston	Little Kanawha										.09	.30	.20				.11					T.		.60	.05	.35			.05	.02			1.77
Davis	Monongahela			T.			T.				.16	.08	.55	.18	T.							T.	.03	.45	.26				.45	.30	.05		2.51
Elizabeth	Little Kanawha													.20				.30						.75					.11	.15			1.51
Elkins ***	Monongahela			T.	T.	.01		.01		.12	.04	.49	.16				.06				.02	T.		.63	T.		.08	.27	.27	.12			2.28
Fairmont	do						T.					.11	.37	.20				.05				T.	T.	.37	.36		.08	T.	.18	.02	T.		1.74
Glenville	Little Kanawha											.10	T.	.13			.10				T.	T.		.80					.76				1.89
Grafton	Monongahela											.43	.16	.06			.04					.02	.02	.55				.20	.15	.23			1.86
Lost Creek	do					T.					T.	.42	.11	.14			.08				T.	T.	T.	.73					.28	T.			1.76
Mannington	do						T.				T.	.37	.17	.09			.08					.03	T.	.63					.94	.03			2.34
Morgantown	do											.38	.13													1.15		.40		.85	T.			2.91
Moundsville	Ohio											.23	.15	.11						.08		.28		.16						.29			1.30
New Cumberland	do																																
New Martinsville	do											.35	.08				.05						.20	.20					.19				1.07
Parkersburg ***	Ohio					T.		T.			.19	.03	.13				.13				.05	T.	.73	.16	.30				.30				2.02
Parsons	Monongahela			.10								.35				T.								1.68				.25	.20	.18			2.76
Philippi	do			T.		T.					T.	.36	.14	.08			.05				T.	T.	.04	.49				1.29	.24	.08			2.77
Pickens	do			.10						.19	T.	1.32	.23	.05			T.	T.						.56	T.			.05	.39	1			2.89
Rawlesburg	do						.02				.06	.10	.12	.18				.02						.30	.32				.40	.10	.36		1.98
Saint Marys	Ohio						T.						.10	.25									.70						.25	T.			1.30
Smithfield	Fishing Creek						T.					.12	.33	.14				.36						.71			.16		.54				2.36
Terra Alta	Monongahela																																
Wellsburg	Ohio										T.	.40	.08				.05	T.			.20	.05	T.	.45	T.				.25	T.			1.48
Weston	Monongahela										T.	.16	.12	.20				.02				.08	.02	1.50				.02	.50		.10		2.72
Wheeling	Ohio	T.	T.			T.	.01					.67	.37	.11				.05				.41		.17	.17	T.			.54				2.50
Southern Section.																																	
Bancroft	Great Kanawha											.03		.49										.75	.25					.25			1.77
Beckley	do											2.70												1.30					1.51	.18			5.69
Bluefield	do			.05								1.95												.68					.35				3.03
Charleston	do								.04			.33	.23	.20				.05				T.		.47	.19	.02			.15		.06		1.74
Clay	do												.50	.40									T.						.10	.45			1.45
Cuba	Sand Creek											.20	.11				.10				T.		.10	.38					.21				
Dunbaw	Big Sandy																																
Elkhorn	do			T.								.47												1.05					.97	.11	.02		2.62
Evans												.15	.12				.09						.15	.36					.42				1.29
Green Sulphur Spgs.	Great Kanawha											.45	.12				T.					T.		.61	.05				2.32	.30			3.85
Hinton	do			.02	T.							T.	.18	.08				.02						.16	.40				.16	.98	.08		2.08
Holcomb	do			T.			T.				T.	.37	.19					.13						.08	.11				.70	.93	T.		2.51
Huntington	Ohio					T.						.30	.22	.28										1.00			.07			.16			2.03
Lewisburg	Great Kanawha											.45	T.				T.						T.	.60					1.08				2.13
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do			.05			T.	T.		.08	.11	.25	.04				T.						T.	.22	.16			.40	.55	T.			1.86
Nuttallburg	do										.20	.30	.10				.02							.30				T.	.80	.40			2.12
Point Pleasant	Ohio								.04			.20	.18	.14				.04				.01		.52					.04	.38			1.55
Powellton	Great Kanawha											.39	.10				.05								.73					.60				1.87
Robertsburg	do								.05			.06	.28	.20										.42	.04					.10				1.15
Ryan	do							.01			.01	.06	.18				.07				.08		.21	.29					.02	T.			0.93
Spencer	Little Kanawha											.67	.12											.45		T.								1.24
Sutton	Great Kanawha										T.	T.	.30	T.				T.				T.		.20					T.	.55	T.			1.05
Union	do		T.	.10								.39										T.		.26				T.		T.			0.39
Williamson	Big Sandy									T.		.12	.34	.02										.06	.04					.22	.06			0.92

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

Daily Temperatures for April, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	36	38	36	46	56	64	65	69	77	76	71	54	48	56	60	60	55	65	75	77	72	67	69	79	85	88	88	79	80	70	..	65.4
	Minimum	22	13	26	23	23	39	31	19	25	38	51	42	32	21	20	22	38	21	38	45	45	47	47	41	41	43	46	56	46	34	..	34.6
Burlington	Maximum	44	47	41	53	59	73	66	68	80	89	68	64	57	59	61	68	62	83	85	79	66	76	83	89	93	89	89	85	87	70	..	70.5
	Minimum	29	17	32	28	26	39	38	25	29	45	54	45	37	25	23	25	45	26	47	48	51	47	48	48	45	48	52	57	49	43	..	39.0
Lost City	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Martinsburg§	Maximum	50	52	43	58	62	75	71	74	82	83	68	65	51	63	67	68	67	75	85	86	74	62	80	87	94	94	91	92	84	74	..	72.7
	Minimum	23	26	30	31	29	35	42	33	35	39	58	50	40	32	30	35	37	39	49	56	50	48	50	55	56	60	59	60	58	55	..	43.2
Moorefield	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Romney	Maximum	44	50	43	47	62	69	71	70	82	80	63	65	54	69	60	70	65	69	86	88	82	70	80	90	95	101	96	90	91	77	..	72.3
	Minimum	30	20	35	29	28	38	38	26	31	50	55	50	38	27	25	28	46	29	48	69	50	50	51	53	51	72	70	60	51	46	..	42.8
Upper Tract	Maximum	49	49	43	51	65	66	68	..	80	82	80	75	58	65	61	68	62	60	70	75	75	67	72	82	90	96	93	89	85	80	..	70.9
	Minimum	17	16	28	25	25	41	42	..	25	49	46	54	37	22	22	22	30	43	25	45	47	50	54	45	47	50	52	58	49	40	..	38.2
Northern Section.																																	
Bens Run	Maximum	41	49	46	55	63	74	64	77	82	80	71	58	57	64	65	67	64	73	82	80	70	75	76	88	92	92	88	85	80	70	..	70.9
	Minimum	27	23	29	24	35	47	40	30	56	45	55	45	38	30	31	33	49	32	41	49	58	50	52	49	54	56	49	52	43	..	..	42.7
Buckhannon	Maximum	40	47	38	49	67	72	66	70	79	80	64	60	45	56	62	62	62	62	78	77	79	75	72	82	87	88	87	82	82	76	..	68.2
	Minimum	27	18	28	28	27	48	39	25	35	45	32	42	35	24	30	28	47	27	37	54	47	52	54	47	50	50	52	57	48	48	..	39.4
Central Station	Maximum	..	..	..	..	64	74	66	73	82	82	69	61	52	61	66	61	62	72	83	89	77	77	72	84	90	90	88	87	83	68	..	74.0
	Minimum	..	..	..	..	27	49	40	24	35	50	51	40	36	24	25	27	40	26	36	44	44	55	56	47	50	52	60	57	50	38	..	41.7
Creston	Maximum	50	51	47	60	65	80	71	78	84	84	71	63	55	67	73	68	65	75	86	85	81	77	80	88	94	95	93	89	88	78	..	74.7
	Minimum	29	18	30	23	29	53	41	28	38	46	55	43	39	28	28	30	43	30	55	44	45	58	55	51	52	54	55	60	53	42	..	41.2
Elkins	Maximum	41	41	34	48	61	68	62	72	78	79	62	54	43	57	61	61	55	66	76	76	75	71	71	82	88	88	87	82	81	64	..	66.1
	Minimum	23	18	28	27	27	47	34	24	34	46	50	37	29	26	24	27	35	26	36	45	44	57	52	46	46	49	50	54	47	41	..	37.6
Fairmont§	Maximum	36	47	40	58	63	73	68	80	82	80	63	57	55	64	72	69	66	78	82	82	79	77	75	92	93	95	92	84	83	70	..	71.5
	Minimum	22	20	24	30	29	38	42	28	32	40	56	44	37	28	28	30	38	29	40	44	52	54	56	50	52	53	56	59	54	41	..	40.2
Glenville	Maximum	43	44	43	55	60	75	73	77	82	78	77	63	59	65	67	67	63	83	82	77	77	76	76	87	91	94	94	85	79	74	..	71.9
	Minimum	30	20	32	24	28	51	40	27	37	45	56	45	40	26	21	29	44	36	44	44	55	57	56	52	53	55	54	60	53	42	..	41.9
Grafton	Maximum	36	40	40	53	69	59	57	75	79	78	68	60	48	58	66	65	61	69	78	87	89	79	75	85	90	94	92	85	83	75	..	69.5
	Minimum	29	19	31	26	27	41	39	23	35	46	54	45	37	27	26	29	42	28	32	46	49	56	57	50	50	52	54	57	50	53	..	40.3
Lost Creek	Maximum	43	44	39	55	62	74	68	74	81	81	66	59	49	62	65	59	63	71	80	78	77	76	73	85	91	92	89	83	83	70	..	69.7
	Minimum	29	15	31	24	25	53	41	24	34	53	55	43	36	23	24	27	43	26	37	47	45	53	57	48	52	51	53	58	53	38	..	39.9
Mannington	Maximum	35	42	39	53	62	71	68	70	79	79	70	61	49	58	64	60	59	71	81	81	75	76	73	85	89	90	90	82	81	74	..	68.9
	Minimum	29	18	31	19	26	39	36	24	31	42	55	41	34	25	25	28	42	26	36	43	48	56	55	49	49	50	52	55	49	39	..	38.5
Morgantown	Maximum	32	41	39	51	60	68	64	71	79	79	66	57	50	56	61	..	58	68	79	79	71	75	74	83	86	88	87	83	..	79	..	67.3
	Minimum	28	21	29	26	36	37	48	..	..	62	55	44	35	27	..	33	41	..	50	57	49	58	56	54	57	58	61	57	..	44	..	44.9
New Cumberland	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
New Martinsville	Maximum	37	45	42	56	65	75	67	77	84	79	72	61	56	64	70	60	64	74	84	83	77	78	78	90	94	95	91	87	81	73	..	72.0
	Minimum	22	23	30	22	32	47	42	30	38	45	52	45	30	29	32	32	41	30	41	49	52	57	58	54	55	55	58	59	54	42	..	42.1
Parkersburg	Maximum	38	43	41	54	61	73	62	72	82	81	67	55	53	60	64	63	60	71	82	80	74	72	76	85	91	91	87	85	80	69	..	69.1
	Minimum	28	22	30	27	39	51	44	37	43	54	50	44	41	34	37	35	42	36	44	53	54	60	59	56	60	61	60	62	56	47	..	45.5
Parsons	Maximum	40	45	45	40	62	70	70	74	80	78	60	40	45	59	64	64	59	73	78	79	73	72	70	82	88	89	89	83	81	65	..	67.2
	Minimum	10	10	23	24	30	37	33	22	30	40	37	32	31	21	23	27	30	23	35	40	44	51	54	51	45	47	51	55	48	38	..	35.1
Philippi	Maximum	43	42	39	53	64	72	66	74	81	83	76	68	45	57	55	63	60	76	81	81	79	76	74	85	91	92	91	84	82	70	..	69.9
	Minimum	18	14	24	28	24	49	40	23	33	50	54	43	37	26	24	27	43	25	37	45	46	55	57	48	49	50	53	57	50	40	..	39.0
Pickens	Maximum	43	41	30	57	56	67	65	79	82	80	60	52	45	71	..	61	62	75	80	80	79	69	69	86	89	87	83	82	82	68	..	68.3
	Minimum	22	17	21	23	27	43	35	30	42	53	46	37	31	25	..	30	36	27	38	46	45	52	52	49	52	53	55	40	48	38	..	38.4
Terra Alta	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Wellsburg	Maximum	33	38	36	48	60	67	57	65	77	76	66	54	56	61	52	52	48	67	78	79	69	72	73	80	85	86	81	80	74	61	..	61.4
	Minimum	27	26	26	25	35	47	41	32	42	52	49	44	28	31	35	30	45	33	54	57	47	56	57	55	60	59	62	62	57	45	..	44.0
Weston§	Maximum	40	46	42	44	54	64	72	76	82	80	63	58	56	62	66	64	62	74	80	80	78	77	76	88	84	90	88	83	82	68	..	69.2
	Minimum	28	18	22	20	28	30	50	56	58	60	55	45	38	22	26	28	31	28	40	48	46	54	56	59	56	50	55	58	52	50	..	42.1
Wheeling§	Maximum	35	44	39	61	67	77	67	78	85	81	66	62	60	69	74	55	60	77	85	87	77	80	81	91	99	97	92	88	88	74	..	73.5
	Minimum	22	22	31	24	28	37	41	28	30	38	52	43	38	29	30	33	42	31	42	49	49	53	58	55	56	56	58	61	58	44	..	41.3
Southern Section.																																	
Beckley	Maximum	50	50	49	54	60	70	74	63	77	76	65	60	59	70	72	76	60	71	78	80	80	85	83	83	84	85	81	81	78	70	..	70.8
	Minimum	20	19	19	21	29	30	31	30	34	35	41	30	26	26	23	26	29	30	31	35	43	43	45	47	48	47	40	45	45	41	..	33.6
Bluefield	Maximum	47	45	40	45	56	71	71	75	78	75	72	75	52	61	63	65	62	73	76	80	78	70	68	80	84	87	87	85	80	79	..	6..3
	Minimum	23	23	26	27	25	49	45	38	50	57	53	42	35	27	30	32	42	42	32	48	52	48	51	48	52	52	55	56	50	48	..	42.4
Charleston	Maximum	50	49	44	58	66	80	89	78	86	85	74	64	53	66	70	69	65	77	86	87	75	76	80	91	91	95	93	90	89	77	..	71.9
	Minimum	21	23	31	27	32	50	40	34	45	51	51	42	42	32	32	33	15	33	40	48	50	56	58	53	55	57	59	62	54	46	..	43.1
Elkhorn	Maximum	48	47	42	52	57	72	71	76	79	77	76	57	54	61	63	65	63	69	78	79	79	71	70	77	83	88	86	84	79	71	..	69.1
	Minimum	22	25	29	28	32	42	41	37	47	53	54	39	36	28	35	32	18	32	37	45	52	52	55	48	51	53	54	57	49	46	..	41.8
Green Sulphur Spgs.	Maximum	51	50	41	55	61	76	71	78	82	76	62	62	50	65	66	69	64	74	82	72	78	82	72	81	88	92	91	83	82	72	..	70.9
	Minimum	16	17	28	26	23	36	33	28	38	40	59	35	32	24	25	26	47	26	31	48	43	38	51	47	46	47	47	49	54	42	..	36.4
Hinton§	Maximum	54	50	40	58	60	78	71	79	82	81	64	65	54	67	68	71	65	71	84	84	78	73	70	84	89	93	93	81	84	74	..	72.3
	Minimum	21	21	24	29	27	31	38	35	36	42	48	37	37	29	29	30	31	31	32	35	42	47	53	51	52	51	51	52	53	46	..	38.1
Holcomb §.	Maximum	47	43	48	52	62	70	65	76	80	76	80	57	48	61	65	63	68	70	79	79	78	72	72	80	90	91	89	82	72	67	..	69.4
	Minimum	20	17	26	26	25	36	33	27	37	44	37	46	45	27	20	18	33	26	38	43	41	54	58	51	49	47	49	56	45	39	..	37.1
Huntington §	Maximum	48	47	45	57	64	78	64	76	83	80	70	70	52	62	68	66	64	74	84	86	69	71	80	85	89	92	90	86	85	75	..	72.0
	Minimum	23	25	27	25	31	42	47	39	42	51	56	48	41	33	35	35	37	36	41	47	52	56	58	55	56	58	61	62	58	46	..	44.1
Lewisburg	Maximum	48	46	41	51	59	72	68	75	78	78	68	59	51	62	64	65	60	70	78	78	74	70	68	80	84	87	87	88	80	71	..	68.7
	Minimum	17	17	28	21	23	37	34	29	37	44	51	41	33	25	28	26	11	26	33	40	45	45	47	46	48	48	48	53	50	43	..	36.8
Madison§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Marlinton	Maximum	43	44	36	47	54	64	60	67	74	72	62	63	46	54	58	62	58	66	72	73	67	64	65	71	78	82	83	74	75	64	..	63.2
	Minimum	15	14	28	23	20	42	28	22	28	38	52	38	32	20	20	20	38	21	28	34	36	46	45	47	46	48	48	52	46	37	..	33.7
Point Pleasant	Maximum	49	50	48	59	64	81	72	77	85	83	70	63	56	65	69	69	65	74	87	88	75	71	79	88	92	91	92	88	86	77	..	73.9
	Minimum	16	18	27	18	33	46	42	30	41	46	53	41	30	27	30	33	37	30	38	48	46	57	54	51	51	56	55	59	55	40	..	40.5
Powellton	Maximum	51	49	45	.	..	80	78	80	86	88	84	72	50	65	69	70	64	.	84	86	89	78	..	..	..	95	87	92	86	74	..	74.7
	Minimum	22	23	32	.	..	55	60	33	45	58	68	43	40	30	31	33	46	..	62	46	49	61	..	..	..	54	59	57	51	45	..	45.8
Robertsburg§	Maximum	45	45	59	57	75	65	76	84	80	79	59	58	62	65	68	65	75	85	75	70	70	78	80	92	92	90	85	85	74	..	..	71.9
	Minimum	16	19	25	19	27	25	35	30	37	46	52	36	40	28	29	28	39	28	36	45	42	54	53	50	50	54	55	60	51	39	..	38.3
Ryan	Maximum	41	45	43	51	62	70	73	79	86	83	72	68	62	61	67	67	65	75	82	82	82	79	78	85	89	90	89	85	84	76	..	72.4
	Minimum	14	14	29	20	24	48	38	26	37	45	53	39	36	23	24	26	24	26	40	46	56	55	55	53	50	51	53	55	50	36	..	38.2
Spencer§	Maximum	48	46	44	56	63	79	69	77	86	87	70	54	64	70	57	60	61	79	80	86	75	75	89	86	91	94	88	89	76	76	..	72.8
	Minimum	25	16	22	21	26	41	46	46	39	44	55	37	22	24	37	37	35	34	37	54	46	45	34	57	49	50	56	56	65	37	..	39.8
Union §	Maximum	43	41	58	72	71	75	71	80	70	60	58	59	63	64	68	80	82	75	80	75	68	69	80	87	90	90	81	82	72	..	..	71.0
	Minimum	17	28	26	25	35	50	32	30	48	39	37	33	27	29	27	32	25	27	40	46	48	50	44	48	49	50	52	46	44	32	..	35.1
Williamson§	Maximum	52	48	43	58	53	80	70	80	84	84	68	64	52	65	70	70	66	77	84	88	74	80	76	88	92	93	90	88	85	77	..	73.1
	Minimum	25	25	27	27	30	32	45	40	42	49	55	45	44	33	33	34	36	37	38	43	49	55	58	56	57	58	59	61	57	52	..	43.4

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, April, 1913.



STACK
JUL 1 1915

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MAY, 1915

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MAY 28, 1915

Departure of the Mean Temperature from the Normal, May, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIII. PARKERSBURG, W. VA., MAY, 1915. NO. 5.

GENERAL SUMMARY.

The month averaged slightly cooler and somewhat wetter than usual, with a favorable rainfall distribution. Although averaging cool, lower temperatures occurred in every other May for the past 21 years, except three, and there was practically no damage from frosts in the agricultural districts. Owing to protracted cool, rainy weather, however, crops and farm work were nearly ten days late at the close of the month; but the outlook was generally favorable, especially for fruit. No snowfall was recorded.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 29.94 and 29.93 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.28 inches on the 11th, and 29.51 inches on the 4th. Elkins, 30.34 inches on the 11th, and 29.39 inches on the 4th.

TEMPERATURE.

The monthly mean for the State, 46 stations reporting, was 61.1°. The mean departure from the normal for 39 stations having ten or more years of record was minus 1.4°. The month opened with the temperatures slightly below the normal, but the 3d-4th and 7-8th were somewhat warmer than usual. Cool weather again occurred on the 9-11th, 17-20th, and 26-27th, with the lowest readings of the month occurring generally on the 2d, 10th, 18th, and 27th, when light to killing frosts occurred in many of the more elevated sections. Not much damage resulted in the agricultural sections. The temperatures fell to the freezing point at six stations in the first decade, and at one station (Bayard) a reading of 32° was also recorded on the 18th and 27th. The highest temperatures occurred generally on the 3d, 10th, 11th, 21st, and 22d.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 76 per cent; 8 p. m., 64 per cent. The May averages for the same hours for the past 26 years are 75 and 64 per cent, respectively. Elkins, 8 a. m., 76 per cent; 8 p. m., 65 per cent. The May averages for Elkins for the same hours for the past 14 years are 80 and 66 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 54 stations reporting, was 4.22 inches. The mean departure from the normal for 45 stations having ten or more years of record was plus 0.38 of an inch. Light showers occurred in most sections on the 3d-4th and 7-8th, and moderate showers on the 12-13th. Light to moderate showers were again general over the northern sections and scattered over the southern on the 16-17th. The last decade was especially wet, moderate to heavy showers occurring in practically all sections on the 21st-23d, 26-27th, and 29-30th, with scattered showers on the other dates. The heaviest rainfall of the month was recorded on the 21st-22d and 29-30th.

WIND.

The average wind velocity at Parkersburg was 5.5 miles per hour, or 0.3 of a mile above the May average for the past 25 years. The average at Elkins was 4.2 miles per hour, or 0.3 of a mile above the May average for 15 years. The highest velocity at Parkersburg was 44 miles per hour from the northwest on the 21st, and at Elkins 25 miles per hour from the west on the 4th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 37 per cent of the possible amount, or 19 per cent below the May average for 17 years. The average at Elkins was 41 per cent, or 14 per cent below the May average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 6th, 10th, 11th, 18th, and 23d; Grafton, 1st, 2d, 3d, 6th, 9th, 10th, 11th, 13th, 14th, 15th, 18th, 19th, 25th, 26th, and 27th; Hinton, 6th; Mannington, 2d, 6th, 10th, 11th, 18th, 23d, 24th, and 25th; Marlinton, 2d, 11th, and 25th; Williamson, 14th, 15th, and 18th.

Frost, light: Burlington, 2d, 11th, and 18th; Elkins, 2d, 11th, 18th, and 27th; Green Sulphur Springs, 10th; Lewisburg, 1st and 10th; Mannington, 2d and 11th; Parkersburg, 10th and 18th; Pickens, 6th, 18th, and 27th.

Frost, heavy: Davis, 2d and 18th; Marlinton, 1st, 6th, and 18th.

Frost, killing: Bayard, 2d, 11th, and 27th; Davis, 27th; Marlinton, 10th; Romney, 27th.

Hail: Clay, 15th; Grafton, 4th; Hinton, 29th; Mannington, 3d; Morgantown, 15th and 16th; Parkersburg, 21st.

Halo, lunar: Pickens, 25th.

Halo, solar: Ryan, 1st and 6th; Wellsburg, 25th.

Haze: Bayard, 10th and 11th.

Thunderstorms (dates and number of stations reporting): 3d, 9; 4th, 7; 6th, 1; 15th, 1; 16th, 4; 20th, 5; 21st, 7; 22d, 7; 23d, 2; 25th, 1; 26th, 3; 27th, 1; 28th, 1; 29th, 7.

COMPARATIVE DATA FOR MAY.

Year.	Temperature.			Precipitation.	
	Mean.	Highest.	Lowest.	Rain and Melted Snow.	Snowfall in inches.
1891	57.2	..	....	3.18	....
1892	62.2	96	32	5.04	....
1893	59.5	92	30	4.51	....
1894	62.1	100	28	4.44	....
1895	61.6	105	20	2.60	....
1896	68.3	95	33	3.01	....
1897	57.6	90	23	4.60	....
1898	63.0	94	28	4.51	....
1899	64.1	96	35	5.17	0
1900	62.5	98	21	2.99	0
1901	61.8	96	21	6.15	0
1902	65.2	98	25	3.17	0
1903	64.3	95	20	3.03	T.
1904	61.8	98	25	3.55	T.
1905	64.2	96	26	4.95	0
1906	62.7	98	22	2.59	T.
1907	59.0	93	24	3.88	T.
1908	63.4	96	28	6.19	0.1
1909	60.8	93	21	3.82	0.1
1910	57.9	96	19	3.92	T.
1911	66.0	100	22	1.46	T.
1912	63.3	94	31	3.93	T.
1913	61.6	95	19	5.16	0
1914	62.4	100	24	1.96	0
1915	61.1	92	29	4.22	0
Entire period	62.1	105	19	3.92	T.

Climatological Data for May, 1915.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard [b]	Grant	2,500	12	55.4	−1.8	80	22	29	2 †	44	6.22	+2.03	1.10	0	16	14	4	11	w.	Solomon Clark
Burlington	Mineral	875	20	57.9	- 3.8	78	4 †	35	2 †	40	4.33	+0.48	1.23	0	7	9	15	7	nw.	J. W. Vandiver
Franklin	Pendleton		8																	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25								4.35	+0.66	1.12	0	11				w.	S. W. Lightner
Lost City	Hardy		8																	B. D. Hinegardner
Martinsburg	Berkeley	435	23	60.9	−2.8	82	8	39	27	38	4.95	+1.23	1.67	0	12	16	9	6	w.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18																	John C. Fisher
Romney	Hampshire	824	17	61.7	−0.8	85	22	35	11 †	45	4.31	+0.62	1.05	0	11	4	18	9	w.	Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	59.6[a]	−2.3	85[a]	21	35 [a]	5 †	40[a]	3.12	−0.33	1.00	0	9	20	4	7	e.	J. M. Mallow
Averages and	Extremes			59.1	−2.2	85	21 †	29	2 †	45	4.55	+0.78	1.67	0	11	13	10	8	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	61.2	−2.4	80	11 †	41	2 †	34	3.57	−0.47	0.75	0	12	16	7	8		J. D. Riggs
Brandonville	Preston	1,809	1								5.63		1.04	0	12					W. T. Miller
Buckhannon	Upshur	1,411	24	60.0	−2.2	82	21	36	6	40	4.39	−0.01	0.85	0	12	10	9	12		H. A. Darnall
Cairo	Ritchie	674	12	62.0	−1.9	86	22	35	11	48	4.78	+1.35	1.03	0	16	8	12	11	sw.	Van A. Zevely
Central Station	Doddridge	950	12	59.0[a]		84	21	34	2 †	39[a]	2.56	−0.96		0						G. W. Sherwood
Cheat Bridge	Randolph	3,600	1																	Franz A. Degler
Cortland	Tucker	3,300	1								3.99		0.62	0	10					Samuel Harmon
Creston	Wirt	701	13	64.5	+1.0	88	10	38	11	48	3.89	+0.45	0.91	0	15	4	7	20	w.	J. M. Reed
Davis	Tucker	3,093	7								4.73		0.66	0	17	9	4	18	w.	Ross C. Male
Elizabeth	Wirt	646	4								3.51		0.84	0	14					E. D. Ball
Elkins	Randolph	1,940	15	58.8	−0.3	82	21	35	11	39	2.86	−1.12	0.68	0	16	2	10	19	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	61.0	−1.6	85	11	37	2 †	46	5.61	+1.69	1.86	0	16	16	2	13	w.	F. P. Hall
Glenville	Gilmer	738	25	62.0	−1.5	86	21 †	40	1 †	40	3.00	−1.01	0.52	0	11	9	2	20	s.	M. T. Brannon
Grafton	Taylor	1,000	22	61.6	−0.7	86	21	32	2	47	5.45	+1.17	1.09	0	15	11	7	13	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	60.8	−0.2	84	21	34	2 †	46	3.80	−0.42	0.83	0	13	13	7	11	w.	Allen Smith
Mannington	Marion	974	12	59.3	−2.1	82	21	35	2 †	40	4.91	+1.06	1.42	0	18	6	11	14	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	60.1[a]	−2.6	83	21	36[a]	27	34	4.23	+0.64	0.90	0	7	3	12	16		Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	59.2	−4.1	86[c]	21	37	2 †	36[c]	3.54	+0.34	1.70	0	16	9	6	16		M. Z. White
New Cumberland	Hancock	987	15																	M. F. Smith
New Martinsville	Wetzel	634	21	62.1	−1.7	87	25	38	2 †	41	3.90	+0.38	1.05	0	12	9	9	13	s.	Wm. Ankrom
Parkersburg	Wood	638	26	61.6	- 1.6	86	21	40	10	32	3.47	+0.01	1.08	0	16	6	11	14	n.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	57.4	- 1.9	82	20	32	2	33	4.28	+0.35	1.00	0	13	6	14	11		J. W. Swisher
Philippi	Barbour	1,149	22																	J. D. Dadisman
Pickens	Randolph	2,697	24	58.9	0	89	14	33	18	47	4.79	−0.22	1.52	0	12	14	8	9	w.	Dr. J. L. Cunningham
Rowlesburg*	Preston	1,375	29								6.85		1.70	0	17				w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7								3.18		0.70	0	11					J. O. Goodman
Smithfield	Wetzel	835	10	59.1		85	16	32	10	45	6.40	+2.72		0	18	9	8	14	w.	G. M. Whisler
Terra Alta	Preston	2,612	14																	H. C. Shaffer
Wellsburg	Brooke	1,225	20	57.1	−3.8	79	21	35	27	31	5.03	+1.63	1.08	0	12	7	11	13	w.	C. P. Waugh
Weston	Lewis	1,026	26	61.2[a]	−2.3	84[a]	21	38 [a]	6 †	36[a]	3.64	−0.56	1.06	0	14	9[a]	7[a]	14[a]	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	60.0		84	21	39	2 †	39	5.10	+1.67	1.85	0	18	8	7	16	w.	Miss M. B. Forsyth
Averages and	Extremes			60.3	−1.7	89	14	32	2 †	48	4.24	+0.41	1.86	0	14	9	8	14	w.	
Southern Section.																				
Bancroft	Putnam	574	11	62.6	-1.8	87	21	40	10 †	37	4.29	+0.24	0.87	0	16	14[a]	0[a]	16[a]	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	61.2	+1.6	86	30	37	10 †	40	5.55	+2.53	1.20	0	8	8	5	14	w.	John A. Ewart
Bluefield	Mercer	2,558	20	63.2	+0.8	83	22	39	19	34	3.01	−0.90	0.75	0	11	15	7	9		Norfolk & Western Ry.
Charleston	Kanawha	597	29	66.5	+0.5	91	21	41	10	41	4.09	+0.19	0.99	0	16	10	10	11	w.	Miss Mary E. Heaves
Clay	Clay	706	0								3.56		1.07	0	13	10	10	11		Prof. E. H. Knabenshue
Cuba	Jackson*	650	14	62.2	−0.7	86	21	34	10	45	3.57	+0.17	1.05	0	12	3	20	8	w.	C. T. Perry
Dunlow	Wayne	703	7																	L. A. Smith
Elkhorn	McDowell	1,933	22	63.0	+0.3	84	21	41	18	34	4.70	+0.57	0.65	0	12	8	20	3	w.	J. J. Lincoln
Evans	Jackson	606	0								5.05		1.67	0	11	6	5	20		B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	62.1	+0.4	84	21	36	10	39	3.00	−0.43	1.15	0	10	23	1	7	w.	W. H. Gwinn
Hinton	do	1,450	25	63.2	−1.1	88	21	40	10	39	3.21	−0.66	0.82	0	15	8	1	22	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	60.6		86	21	32	10	41	4.56		1.23	0	12	14	2	15		R. E. Ferguson
Huntington	Cabell	538	19	63.8	−1.1	88	21	42	10 †	34	3.75	−0.19	0.88	0	14	8	9	14	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	60.6	−0.2	82	21	35	10	35	2.88	−0.90	0.84	0	10	19	8	4	nw.	Geo. T. Argabrite
Logan	Logan	687	12																	Dr. J. E. McDonald
Madison	Boone	704	9	65.6[d]		91[d]	21	41 [c]	10 †	39	6.42		1.31	0	17	8[c]	19	1		S. E. Bradley
Marlinton	Pocahontas	2,131	18	55.4	−4.2	76	21	31	6	34	3.34	−0.60	0.70	0	12	3	23	5	sw.	S. L. Brown
Nuttallburg [b]	Fayette	2,252	22	57.4	-3.9	80	21	36	18	30	4.73	+1.26	1.05	0	....	10	6	4		Miss Donna Tully
Point Pleasant	Mason	553	24	62.9	-2.7	88	21	37	10 †	44	4.30	+0.53	1.80	0	15	11	5	15	ne.	W. D. Holmes
Powellton	Fayette	933	17	66.7[d]		92[d]	20	40 [d]	18	38[c]	4.00	+0.04	0.86	0	8	8[c]	14[c]	4[c]		F. L. Evans
Robertsburg	Putnam	574	14	61.8	-2.5	87	21 †	36	9	45	3.92	+0.41	1.06	0	14	11	8	12		E. C. Brace
Ryan	Roane	700	11	61.7	−0.8	85	21 †	33	10	45	3.72	+0.21	1.04	0	13	4	11	16		E. C. Brace, Jr
Spencer	do	784	16	61.6		87	21	35	6 10 11	47	2.93		1.05	0	13	1	23	7		A. M. McKown
Sutton	Braxton	839	11	63.4[b]		89[b]	21	38 [b]	11	45[c]	3.98	−0.45	0.80	0	11	10	12	9		Ben Gillespie
Union	Monroe	2,250	10	61.0[a]	+0.3	84[a]	20	36	9	37[a]	4.02	+1.49	0.83	0	8					J. C. Shanklin
Williamson	Mingo	660	13	65.6	−0.4	89	21	42	2	41	4.12	+0.21	0.86	0	17	8	14	9	w.	J. F. Keyser
Averages and	Extremes			62.4	−0.9	92	20	31	6	45	4.10	+0.20	1.80	0	13	11	9	11	w.	
State Averages and	Extremes			61.1	−1.4	92	20	29	2 †	48	4.22	+0.38	1.86	0	13	10	9	12	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for May, 1915.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac			T.	.40	.17		.15	.16			.59		.65			.33	.27					.78	.26	.15	.05	.20			1.10	.83	.12	6.22
Burlington	do			.10	T.			T.					1.23					.23			T.	1.03	.20		T.		T.		.73	.81		4.33
Franklin	do																																
Harpers Ferry	do				.28	T.			T.	.20			.48		.55		.75		.25			.20	.32	.80		T.			T.	.42	.10	4.35
Lost City	do																																
Martinsburg	do			.20	.04			.10					1.02				*	.70			.30	1.42	.25		.05				*	.87		4.95
Moorefield	do																																
Romney	do			.21				.15					.75				1.05	.20			.21	.03	.57		T.				.42	.67	.05	4.31
Upper Tract	do							T.					.55	.10			.16				.28	.08	.45						1.00	.40	.10	3.12
Northern Section.																																	
Glens Run	Ohio					.15		.19	.08				.25					.08			.50	.51	.75				.28		.02	.50	.26		3.57
Grandonville	Monongahela					.12		.10						.65	.27	.24						.75	.71	.80	.23	.12					1.04	.50	5.63
Hackhannon	do			T.	T.	.10	.22		.15				.60					.10			.36	.15	.46		.70		.20			.85	.50		4.39
Fairmont	Little Kanawha			.02	.02	.16		.28	.12				.23	.06				.08			.36	.50	1.03	.19			.85	.10		.33	.45		4.78
Central Station	Middle Is. Creek				T.	.06	T.	.19	.04		*	*	*	*	*	.13		.03			.26	.25	.71	.08	*	*	*	*	*	*	.81		2.56
Great Bridge	Monongahela																																
Northland	do				.40	.34							.54					.27			.18	.20	.49				.34			.61	.62		3.99
Preston	Little Kanawha			.03		.11		.18	.09				.05	.45				.05			.07	.84	.40	.49			.40	.31		.22	.20		3.89
Davis	Monongahela			T.	.26	.33		.16	.10				.30	.22			.21	.20			.24	.30	.51	.05	.10	T.	.38		.28	.66	.43		4.73
Elizabeth	Little Kanawha			.07		.10		.14	.10					.29				.05	.11		.84	.53	.30			.30	.40		.18	.10			3.51
Elkins***	Monongahela			.03	.07	.12		.04	.03				.58	T.			.16	.08	T.		.30	.03	.28	.04	T.	T.	.20		.01	.21	.68		2.86
Fairmont	do				.20	.04		.10	.15				.19	.30			T.	.05			.30	1.86	.70	T.	.03	.02	.25			.27	.97	.18	5.61
Glenville	Little Kanawha					.12		.15	.20				.17	T.				.18			.47	T.	.52	T.		.18	.47	T.		.17	.37	T.	3.00
Gratton	Monongahela				.56			.12	.08				.57	.02			.15	.23			.40	.15	1.09	.36	.40		.03			1.01	.28		5.45
Lost Creek	do			T.	T.	T.		.25	.13				.65	.05				.25			.28	.35	.83	.04		T.	T.	.20		.24	.04	T.	.55	.14	T.	3.80
Mannington	do			.25	.07	.07		.20	.04				.34	.01			.01	.10			.15	.35	1.06	.12	.13		.26	.01	T.	1.42	.32		4.91
Morgantown	do				T.								.75				T.	.35			.28	.68	.90				.70			.57			4.23
Moundsville	Ohio				.05			.15	.05				.12	.03			.05	.03			.01	.170	.56	.22	.02				.01	.47	.05	.02	3.54
New Cumberland	do																																
New Martinsville	do				.10			.18	.05				.20					.12			.40	.55	1.05				.10			.95	.15	.05	3.90
Parkersburg***	Ohio	.06	.04	.08	T.	T.		.16	.02				.18	.01			T.	.02		T.	1.08	.26	.84	.02		T.	.47		.07	.14	.02	T.	3.17
Parsons	Monongahela			.20				.20	.13				1.00	.03			.25					.50		.25			.0		,25	.38	.79	.10	4.28
Philippi	do																																
Pickens	do			.13		.10							.45				.06		.11	.08	.36		1.25		.38		.35			.33	1.19		4.79
Rowlesburg	do				.24	.12		.08	.16				.20	.34			.38	.22				.26	.50	1.28	.02	10		.30		.45	1.70	.50	6.85
Saint Marys	Ohio			T.		.25			.30	.10				.05							T.		.53	T.	.70	.50	.05	T.	.05	.45		.20		3.18
Smithfield	Fishing Creek							.42	.30				.36	.18			.12	.42	T.	.16	.19	.32	.84	.79	.21	.16	T.	.21	.07	.14	1.10	.41	6.40
Terra Alta	Monongahela																																
Wellsburg	Ohio			T.	.27			T.					.63				.17	.18			.29	1.08	1.07		.09		.01		T.	.72	.50	.02	5.03
West Union	Monongahela			.04		.20		.20	.10				.29					.20				.46	.20	.86		.22	T.	.40		.20	.18	.18	3.64
Wheeling	Ohio			T.	.12	.21		.15	.10			.06		.16			.31	.04	.02			1.85	.42	.75	.07	.10		.01		.32	.34	.07	5.10
Southern Section.																																	
Belcher	Great Kanawha			.46	.08			.11	.10				.20	.07						.07	.14	.12	.40	.70			.45	.40	.07		.87	.05	4.29
Beckley	do			.92	.43		.27														1.20				.63		.96		.56	.58			5.55
Bluefield	do	.75			.27				.08				.18			.04					.20	.07		.25	.70		.33	.14					3.01
Charleston	do			.57	.30			.07	.10				.16	.38			T.			.08	.11	.11	.06	.35	T.	.10	.38	.61		.04	.67	T.	4.09
Clay	do			.30	T.			.10	T.				.25	.26			.10			.32	.02	.44	.04			.48	.14		.04	1.07		3.56
Coalton	Sand Creek			.10	T.	.06	T.	.20	.06				.30			T.		.04			.84	.30	1.05					.05	T.	.31	.26		3.57
Gilbert	Big Sandy																																
Gilham	do	.48		.15		.45		.14					.19								.25				.26	.60		.65	.45		.60	.45	T.	4.70
Glasgow				.13			T.	.28					.25								.60	.56	.88	.42	.02		1.67	.12	T.	.12			5.05
Green Sulphur Spgs.	Great Kanawha			.80	.50			.02					.35										.20	.23	.15		.40		.20	.30			3.00
Hinton	do			.82	.56			.10	.04				.06	.16			.02			.01	.04			.04	.18		.02	.58		.12	.46		3.21
Oceana	do			*	.62	T.		.08	.10				*	.30						T.	.54		.37			1.23		*	*	1.32		4.56
Huntington	Ohio			.62	.04			.07	.20				.16	.04						T.	.14		.68	.26			.66	.22	.02	.24	.10		3.75
Lewisburg	Great Kanawha			.55	.29			.28					.28							T.	.04		.19	.73			.33		.05	.14	T.		2.88
Logan	Guyandotte																																
Madison	Great Kanawha	T.	T	1.31	.50			.10	.04						.23		.03	T.		T.	.03	.07		.90	.20	.80	.80	.20	.03	.03	.95	.20	6.42
Marlinton	do			.35	T.			.32	.06				.35						T.	T.	.45		.06	.06			.48		.07	.32	.70	.12	3.34
Nettiburg	do			1.05	.80					*	*	*	*	*						T.	.80		.30	.60			.50				.68		4.73
Point Pleasant	Ohio			.26		.04	.02	.08	.18				.04	.12							.06	.50	.56	.54			1.18	.62		.04	.06		4.30
Powelton	Great Kanawha				.86				.10				.26									.74					.75		.22	.45	.62		4.00
Robertsburg	do			.30				.16	.25				.12	.06						.07	.60	.01	.44	.62			.67	.35		.07	.17		3.92
Sam	do			.18	T.			.11	.15				.33	T.		T.		T.	T.	.01	.36	.03	.81	T.	.03		1.04			.40	.09	.18	3.72
Spencer	Little Kanawha					.15		.10	.21				.15	.20								.32	.20		1.05	0.5	.10		.10	.20		.10	2.9
Sutton	Great Kanawha			T.		T.		.20	.20				.36	.15						T.	T.	.80	.20		.33		.67	.27		.33		.47	3.98
Union	do			.83	.43			T.					.45				T.			T.			.26	.76			.38		T.	.83		.08	4.02
Williamson	Big Sandy			.86	.28			.08	.10				.06	.28			.06			.02	.04		.46	.50			.12	.52	.04	.12	.56	.02	4.12

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T Trace, or less than 0.01 inch.

Daily Temperatures for May, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mea
Panhandle Section.																																	
Bayard	Maximum	62	67	73	70	61	73	73	72	68	65	73	72	70	69	70	75	71	53	64	..	..	80	72	72	74	72	64	70	61	55	64	68 4
	Minimum	37	29	45	46	39	32	47	54	49	34	29	47	56	46	42	41	42	32	37	..	..	37	53	54	39	48	32	44	48	46	44	42.4
Burlington	Maximum	68	71	74	78	61	74	75	78	72	68	75	57	76	72	72	70	65	60	64	58	77	74	78	77	74	77	65	68	60	58	67	69.8
	Minimum	39	35	51	53	48	36	50	57	49	39	35	35	49	42	49	46	49	35	44	40	53	60	52	56	44	52	36	46	52	48	47	46 0
Lost City	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Martinsburg§	Maximum	73	71	78	81	65	78	75	82	75	75	79	64	80	74	75	58	65	58	69	61	80	81	81	75	76	79	69	76	62	54	71	72.4
	Minimum	46	44	52	55	50	40	49	58	57	46	42	48	49	56	51	51	52	41	45	41	47	57	58	59	47	52	39	43	54	51	51	49.4
Moorefield	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Romney	Maximum	75	72	78	78	62	78	79	80	81	72	80	78	80	77	75	72	69	61	67	68	82	85	82	82	79	82	70	74	66	69	73	74.7
	Minimum	40	38	58	57	51	37	53	60	56	40	35	55	51	54	50	47	50	36	45	40	54	61	56	55	45	55	35	46	53	50	48	48 7
Upper Tract	Maximum	74	74	77	75	75	75	73	77	75	74	75	69	75	75	75	80	75	59	64	59	85	82	..	81	78	77	70	73	69	56	60	72.9
	Minimum	37	36	50	49	35	40	51	58	39	38	35	48	51	45	47	50	50	35	44	46	55	55	..	55	49	62	38	45	51	49	46	46.3
Northern Section.																																	
Bens Run	Maximum	67	75	78	75	60	75	74	74	62	70	80	72	77	71	78	80	70	62	67	60	80	69	70	76	78	66	71	65	72	66	71	71.3
	Minimum	45	41	55	51	41	47	53	55	49	42	50	53	56	45	52	56	49	45	42	50	61	61	52	53	52	58	42	54	57	60	54	51.0
Buckhannon	Maximum	67	68	74	75	60	71	77	71	66	64	78	72	73	80	81	81	65	55	61	67	82	72	75	75	78	70	71	80	78	69	74	71.9
	Minimum	44	39	50	52	40	36	54	51	47	41	38	52	57	47	50	51	47	38	41	45	55	54	52	55	45	58	39	50	54	57	52	48.1
Central Station	Maximum	65	72	78	75	62	73	74	73	74	..	..	..	..	..	..	82	70	59	65	65	84	70	75	..	..	..	..	..	..	..	..	..	71 5
	Minimum	40	34	50	52	37	34	56	56	43	..	..	..	..	..	..	52	47	35	41	45	57	61	50	..	..	..	..	..	..	..	..	..	46.5
Creston	Maximum	72	79	82	79	71	75	76	77	70	74	86	76	78	80	76	88	75	63	65	74	85	76	79	80	85	72	74	77	84	72	79	76.7
	Minimum	41	42	54	56	41	39	56	58	49	39	38	55	57	58	52	55	51	40	51	46	63	62	59	61	51	64	57	51	59	59	56	52 3
Elkins	Maximum	62	67	72	70	57	73	75	72	63	64	74	65	71	70	71	77	59	52	65	63	82	76	76	72	80	71	73	78	77	64	75	69.9
	Minimum	42	37	50	46	42	36	58	55	48	41	35	53	53	49	47	50	44	36	41	46	59	60	56	54	48	51	38	50	56	52	50	47.8
Fairmont§	Maximum	69	79	78	74	70	79	76	74	65	73	85	70	77	75	79	83	60	60	70	65	84	69	79	75	84	69	76	71	75	64	79	73.7
	Minimum	46	37	50	52	43	37	44	56	48	41	39	46	54	50	50	54	53	38	42	46	54	61	51	57	48	52	38	45	55	56	50	48.2
Glenville	Maximum	70	75	80	78	66	74	77	76	74	70	80	80	77	76	75	83	82	59	66	70	86	86	80	79	80	74	72	70	69	69	76	75.1
	Minimum	49	42	53	52	42	40	51	50	48	40	40	55	58	41	42	55	48	40	46	45	57	55	56	60	50	62	43	44	53	53	56	48 9
Grafton	Maximum	67	73	78	73	64	76	79	76	78	69	85	76	76	73	74	82	75	60	69	66	86	77	79	75	84	72	73	75	79	66	77	71.6
	Minimum	47	32	53	52	45	38	54	58	45	40	38	52	56	49	49	50	47	39	42	44	58	61	52	56	44	55	39	51	51	56	52	48.5
Lost Creek	Maximum	68	73	76	74	60	79	75	75	65	68	81	72	74	73	75	82	76	61	60	66	84	75	76	75	80	77	70	75	80	70	75	73.2
	Minimum	42	34	51	54	41	34	59	56	45	35	25	61	55	50	45	51	48	36	43	48	57	62	51	57	49	44	40	51	55	58	51	48.3
Mannington	Maximum	65	69	75	72	59	70	75	73	70	66	76	75	76	70	71	80	74	56	63	63	82	74	73	74	77	71	69	68	75	63	73	70.9
	Minimum	44	35	51	49	41	35	54	54	45	40	36	50	55	48	46	49	46	39	42	43	58	59	52	54	46	55	37	50	54	57	52	47.7
Morgantown	Maximum	64	69	74	70	58	69	75	73	67	66	77	73	73	70	71	79	70	55	63	64	83	71	74	71	80	73	69	67	71	59	71	70.0
	Minimum	46	38	53	53	43	42	60	..	49	43	44	51	58	52	48	55	45	49	41	47	58	63	54	60	46	59	36	52	55	53	53	50.2
New Cumberland	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
New Martinsville	Maximum	66	75	79	74	62	77	77	76	71	71	83	78	78	76	80	81	69	59	68	63	85	71	75	75	87	76	71	69	75	67	79	73.0
	Minimum	47	38	54	52	42	38	57	56	49	41	39	50	58	47	52	54	47	41	45	49	60	61	50	57	51	59	10	53	56	58	54	50.2
Parkersburg	Maximum	64	71	80	72	63	70	74	72	60	68	76	66	76	71	74	80	70	58	63	65	86	71	73	76	80	71	68	67	76	72	73	71.2
	Minimum	48	45	55	51	44	43	60	56	48	40	44	57	57	51	55	59	48	42	46	52	60	62	55	60	52	51	43	56	59	59	55	52.0
Parsons	Maximum	68	66	72	70	59	74	75	76	64	66	76	70	72	73	78	62	55	65	62	82	74	75	70	70	80	70	70	76	74	70	71	70.5
	Minimum	34	32	40	45	42	33	48	50	44	38	33	51	56	44	48	45	35	48	41	54	52	49	45	45	46	52	34	46	41	50	48	44.2
Philippi	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Pickens	Maximum	67	72	75	69	65	70	65	69	72	73	84	77	72	89	84	87	63	52	60	68	80	68	81	70	73	63	83	72	68	72	67	71.6
	Minimum	40	39	49	46	42	35	48	42	45	38	37	54	55	45	45	48	45	33	39	48	58	58	53	54	46	52	39	47	48	52	52	46.2
Terra Alta	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Wellsburg	Maximum	56	65	70	66	57	67	73	69	63	63	74	66	72	67	69	71	68	56	61	60	79	73	69	67	74	68	66	66	62	57	69	66.5
	Minimum	41	37	52	49	43	41	57	52	45	44	43	54	54	50	44	47	44	40	38	46	60	62	47	55	49	51	35	50	52	51	45	47.7
Weston §.	Maximum	66	70	76	74	64	71	76	73	64	66	74	..	72	74	78	80	64	60	64	74	84	70	71	76	74	78	76	74	76	70	72	72.2
	Minimum	45	41	52	58	42	38	54	56	53	40	41	56	..	54	56	59	62	38	42	48	54	62	53	58	48	46	48	44	50	52	54	50 2
Wheeling §.	Maximum	65	76	79	74	63	74	77	79	57	83	77	70	83	78	76	82	57	63	71	64	84	70	75	74	81	71	71	72	66	57	75	72.4
	Minimum	45	39	41	52	45	40	46	52	47	44	45	40	45	48	48	50	53	43	43	46	51	62	44	48	51	53	39	46	55	55	55	47.5
Southern Section.																																	
Beckley	Maximum	73	70	77	71	70	78	79	72	79	71	71	74	75	75	77	77	74	70	71	71	80	78	81	81	82	81	71	70	78	84	78	75.5
	Minimum	41	41	54	46	39	49	39	49	39	37	37	50	56	41	46	51	38	40	46	44	54	59	54	52	52	53	51	51	56	54	50	49.8
Bluefield	Maximum	71	74	77	77	65	75	72	75	71	72	71	68	73	76	76	79	78	75	72	64	79	83	82	83	80	77	73	70	79	76	71	74.5
	Minimum	44	46	43	52	45	42	60	55	50	41	49	50	57	48	55	62	56	48	39	47	52	60	62	57	54	60	54	52	59	54	52	51.8
Charleston	Maximum	75	80	84	80	66	74	77	81	73	75	84	70	82	82	83	88	78	66	67	85	91	83	85	84	88	81	81	81	82	74	82	79.4
	Minimum	44	41	56	55	51	43	58	59	50	41	43	50	59	51	57	60	55	42	48	50	58	63	59	60	59	65	51	54	61	58	58	52.6
Elkhorn	Maximum	70	75	78	78	65	76	75	75	75	71	71	67	74	75	76	78	77	69	65	76	84	81	82	79	78	77	72	68	75	69	67	74.1
	Minimum	44	42	48	55	49	42	60	57	47	42	47	52	57	47	55	58	53	41	49	54	55	59	61	55	52	58	56	51	57	53	51	51.8
Green Sulphur Spgs.	Maximum	76	78	80	80	72	77	74	78	72	75	72	65	78	77	80	83	78	69	65	73	84	78	83	80	83	78	70	66	69	74	65	75.2
	Minimum	38	39	52	49	41	38	56	51	42	36	38	50	52	44	49	53	52	45	46	53	51	54	57	56	50	59	55	46	55	54	55	49.0
Hinton §.	Maximum	73	81	80	75	66	81	75	79	73	73	75	68	75	80	84	85	72	71	64	75	88	85	86	82	85	80	72	65	80	70	69	76.4
	Minimum	42	42	42	52	48	43	47	54	46	40	42	45	53	49	50	57	52	41	46	50	54	55	60	58	56	57	58	48	51	56	57	50.0
Holcomb §.	Maximum	74	68	77	72	75	68	74	75	67	70	75	72	71	74	80	76	74	61	63	73	86	74	80	82	75	76	75	77	79	76	73	72.8
	Minimum	45	50	48	50	38	42	36	54	40	32	38	52	56	48	46	48	33	38	40	45	49	53	57	57	55	48	50	56	60	58	48	47.4
Huntington §.	Maximum	72	78	78	69	65	68	74	77	69	72	79	71	80	80	80	85	58	63	63	76	88	75	81	81	84	79	67	77	78	73	77	74.7
	Minimum	46	45	50	58	50	45	52	57	50	42	45	51	58	53	59	59	54	42	47	50	56	63	60	59	57	60	49	49	57	57	56	52.8
Lewisburg	Maximum	67	73	76	74	61	73	71	75	68	69	70	64	74	73	76	79	58	68	63	69	82	81	79	76	81	76	70	67	81	69	63	72.5
	Minimum	37	39	51	49	46	38	53	54	51	35	43	50	54	44	47	53	49	37	47	51	48	56	56	55	50	58	52	48	55	54	52	48.8
Madison	Maximum	66	83	84	80	72	77	75	78	70	..	..	..	82	80	81	85	64	68	64	86	91	85	82	86	86	85	81	82	84	76	..	79.0
	Minimum	44	44	49	55	51	45	52	52	48	41	..	..	..	42	52	59	55	41	45	49	54	62	61	58	60	60	55	54	57	58	59	52.2
Marlinton	Maximum	64	68	70	66	56	65	68	70	61	65	67	68	62	68	70	74	67	58	62	54	76	71	74	72	74	70	64	59	72	64	56	66.3
	Minimum	32	34	50	48	46	34	48	50	42	32	36	50	48	42	43	46	42	32	40	44	52	51	50	52	51	49	44	40	52	51	48	44.4
Point Pleasant	Maximum	74	77	83	78	66	72	76	76	71	71	82	76	82	81	80	84	78	63	62	69	88	74	76	81	82	76	73	72	82	74	77	76.0
	Minimum	41	39	53	54	42	39	57	52	44	37	38	54	53	48	53	59	50	37	43	44	58	63	53	57	51	58	43	54	59	57	53	49.8
Powellton	Maximum	..	..	81	83	..	76	..	80	..	79	80	77	79	82	81	90	74	68	84	92	80	..	..	..	..	83	..	79	82	75	79	80.4
	Minimum	..	..	52	55	..	41	..	56	..	41	42	60	57	49	55	60	55	40	48	63	55	..	..	..	..	55	..	53	59	60	57	53.0
Robertsburg§	Maximum	70	69	80	70	62	72	74	80	81	81	82	69	80	78	82	80	56	62	62	75	87	75	75	76	87	75	74	76	83	75	80	75.1
	Minimum	38	38	39	50	45	39	45	55	36	41	37	49	56	46	55	56	53	37	45	46	52	60	54	54	52	62	45	49	60	57	55	48.6
Ryan	Maximum	70	76	80	72	64	72	76	77	65	70	80	68	77	77	81	82	66	63	64	72	85	73	77	77	85	77	77	74	81	78	80	74.7
	Minimum	36	38	54	35	35	35	56	55	43	33	35	55	55	45	55	56	51	35	45	51	55	58	55	55	60	59	45	51	59	58	53	48.7
Spencer§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Union §.	Maximum	75	78	70	62	74	70	75	68	70	70	67	75	74	79	82	68	70	62	68	84	80	81	77	80	76	63	67	80	65	64	..	72.5
	Minimum	38	52	51	45	39	53	56	48	36	45	50	51	41	49	48	49	37	46	50	51	56	55	54	54	61	53	42	55	55	54	54	49.4
Williamson§.	Maximum	69	83	82	75	67	77	75	78	72	73	80	67	80	81	82	83	65	70	64	87	89	75	85	80	85	78	78	73	80	70	78	76 8
	Minimum	46	42	56	58	50	48	50	60	49	45	46	47	59	55	56	60	56	45	45	52	62	64	65	60	59	60	60	58	59	59	60	54.5

§ Instruments are read in themorning; the maximum temperature then read is charged to thepreceding day, on which it almost always occurs.


No Rain.
No Rain
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

JUL 22 1915

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JUNE, 1915

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JUNE 20, 1915

Departure of the Mean Temperature from the Normal, June, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIII. PARKERSBURG, W. VA., JUNE, 1915. No. 6.

GENERAL SUMMARY.

June was much cooler and considerably drier than usual, with the average sunshine near the normal. The month was exceptionally free from periods of high temperatures, the highest readings of the month at nearly half of the stations being below 90°, while the morning readings on the 24th were exceptionally low, the lowest of record at practically all stations for the last week in June. The rainfall was fairly well distributed over the State and throughout the month. While the season was late, owing to cool weather, crops and pastures were in good condition at the close of the month. Wheat, corn, oats, and potatoes were especially good, and the outlook for peaches favorable; but only a small yield of apples was expected.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.02 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.24 inches on the 28th, and 29.74 inches on the 2d. Elkins, 30.27 inches on the 28th, and 29.68 inches on the 30th.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 67.7°. The mean departure from the normal for 39 stations having ten or more years of record was minus 1.8°. The month opened slightly cooler than usual and slight temperature deficiencies were noted until the close of the first decade, except on the 6-7th. The second decade was somewhat warmer than usual, and the highest temperatures of the month occurred generally on the 13th and 18th. Unseasonally cool weather prevailed from the 22d to the 28th, with the morning readings on the 24th ranging generally from 33° to 45°. Heavy frost occurred in sections of the northern and central mountain counties, but only slight damage resulted. Warmer weather prevailed on the last three days, with the highest readings of the month occurring at a few stations on the 28th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 78 per cent; 8 p. m., 72 per cent. The June averages for the same hours for the past 26 years are 79 and 68 per cent, respectively. Elkins, 8 a. m., 80 per cent; 8 p. m., 68 per cent. The June averages for Elkins for the same hours for the past 14 years are 85 and 75 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 56 stations reporting, was 3.63 inches. The mean departure from the normal for 47 stations having ten or more years of record was minus 0.88 of an inch. Light to moderate showers occurred daily in most sections from the 1st to the 3d, 7th to the 9th, and 12th to the 16th, and scattered showers from the 17th to the 21st. Scattered showers also fell in the northern sections on the 23d and 26th. Moderate to heavy rain fell on the 30th.

WIND.

The average wind velocity at Parkersburg was 4.5 miles per hour, or normal as compared with the June record for 25 years. The average at Elkins was 3.6 miles per hour, or 0.4 of a mile above the June average for 15 years. The highest velocity at Parkersburg was 40 miles per hour from the northwest on the 13th, and at Elkins 22 miles per hour from the west on the 11th.

A violent squall, or wind-rush, attending a thunderstorm, passed over Parkersburg at 3:14 p. m., June 11, causing considerable damage. Portions of several roofs were blown off, two smokestacks were blown down, trolley and telephone services were crippled, several windows blown in, and about twelve shade trees uprooted. The storm passed two blocks northeast of the station and covered only a small area.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 51 per cent of the possible amount, or 7 per cent below the June average for 17 years. The average at Elkins was 51 per cent, or 1 per cent below the June average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 5th, 9th, 17th, 18th, 22d, 23d, 24th, 25th, and 26th; Burlington, 5th, 6th, and 7th; Elkins, 5th, 6th, 10th, and 27th; Grafton, 5th, 6th, 7th, 9th, 10th, 12th, 14th, 16th, 17th, 18th, 19th, 20th, 21st, 23d, 24th, 25th, 26th, 27th, and 28th; Mannington, 5th, 6th, 10th, 16th, 17th, 18th, and 24th; New Cumberland, 16th, 17th, and 24th; Parkersburg, 16th.

Frost, light: Bayard, Buckhannon, Davis, Elkins, Green Sulphur Springs, Lewisburg, Marlinton, and Pickens, 24th.

Hail: Bayard, 26th, Marlinton, 17th; Morgantown, 22d; New Cumberland, 22d; Parkersburg, 11th; White Sulphur Springs, 17th.

Halo, solar: Nuttallburg, 24th.

Thunderstorms (dates and number of stations reporting): 1st, 1; 2d, 4; 3d, 1; 7th, 10; 8th, 5; 11th, 7; 12th, 7; 13th, 12; 14th, 10; 15th, 5; 16th, 1; 17th, 5; 19th, 1; 21st, 3; 22d, 3; 25th, 1; 26th, 3; 29th, 2; 30th, 7.

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.			Precipitation.
	Mean.	Highest.	Lowest.	
1891	71.2	..	....	5.02
1892	74.1	99	41	3.90
1893	70.2	99	40	3.81
1894	70.4	103	32	3.27
1895	72.1	102	38	2.92
1896	69.8	95	30	5.35
1897	69.3	96	35	4.31
1898	70.9	99	41	3.21
1899	72.0	98	35	4.99
1900	71.2	98	41	5.30
1901	70.7	104	32	5.67
1902	68.0	100	33	5.19
1903	65.1	93	34	4.80
1904	69.5	97	36	4.20
1905	70.6	100	34	4.38
1906	70.9	101	38	5.25
1907	65.3	97	33	6.00
1908	69.2	98	36	3.12
1909	71.1	101	35	5.73
1910	66.6	96	32	5.67
1911	70.7	101	40	4.44
1912	67.3	95	29	4.27
1913	69.5	99	29	3.44
1914	72.0	100	30	3.00
1915	67.7	95	33	3.63
Entire period	69.8	104	29	4.43

Climatological Data for June, 1915.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	61.6	−2.2	86	13	33	24	46	5.04	−0.04	1.75	0	12	16	8	6	w.	Solomon Clark
Burlington	Mineral	875	20	65.4	−3.3	86	11 †	40	24	38	4.35	+0.22	2.20	0	7	5	21	4	w.	J. W. Vandiver
Franklin	Pendleton		8																	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25								5.21	+1.64	2.52	0	5				w.	S. W. Lightner
Lost City	Hardy		8																	B. D. Hinegardner
Martinsburg	Berkeley	435	23	70.2	−0.7	94	13	49	3 †	35	5.84	+1.70		0	12	15	11	4	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	18																	John C. Fisher
Romney	Hampshire	824	17	69.4	−0.6	95	13 †	42	24	43	2.96	−1.23	1.46	0	9	9	18	3		Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	65.6	−2.6	90	13	38	24	44	2.95	−1.51	1.50	0	5	21	3	6	w.	J. M. Mallow
Averages and	Extremes			66.4	−1.9	95	13 †	33	24	46	4.39	+0.13	2.52	0	8	13	12	5	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	68.7	−1.8	90	28	44	24	36	5.07	+0.66	1.26	0	8	25	2	3		J. D. Riggs
Brandonville	Preston	1,809	1								2.07		0.30	0	12					W. T. Miller
Buckhannon	Upshur	1,411	24	66.2	−2.8	89	13 †	38	24	38	2.53	−2.37	0.90	0	6	22	4	4		H. A. Darnall
Cairo	Ritchie	674	12	69.4	−1.2	90	14	40	24	39	6.15	+1.42	2.90	0	9	8	17	5		Van A. Zevely
Central Station	Doddridge	950	12			88		36						0						G. W. Sherwood
Cheat Bridge	Randolph	3,600	1																	Franz A. Degler
Cortland	Tucker	3,300	1								3.21		1.98	0	8					Samuel Harmon
Creston	Wirt	701	13	70.0	−0.8	93	28	43	24	41	3.56	−0.62	0.89	0	9	11	7	12	sw.	J. M. Reed
Davis	Tucker	3,093	7								2.51		1.10	0	10	18	0	12	sw.	Ross C. Male
Elizabeth	Wirt	646	4								3.71		0.85	0	10					E. D. Ball
Elkins	Randolph	1,940	15	65.6	−1.0	89	13	37	24	40	2.45	−2.59	0.51	0	13	5	17	8	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	68.6	−1.9	93	18	42	24	42	2.39	−2.28	0.54	0	10	22	3	5	w.	F. P. Hall
Glenville	Gilmer	738	25	68.3	−2.4	90	13 †	41	24	40	2.52	−2.98	0.65	0	6	17	6	7	s.	M. T. Brannon
Grafton	Taylor	1,000	22	68.6	−0.7	93	28	42	5 †	46	2.75	−1.88	0.75	0	11	21	4	5	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	67.3	−0.6	90	18	34	24	43	2.97	−1.07	1.30	0	7	17	5	8	w.	Allen Smith
Mannington	Marion	974	12	66.2	−2.3	87	18 †	38	24	42	2.86	−1.09	0.94	0	9	12	11	7	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	67.6[a]	−1.5	89[a]	18	41[a]	24	33[a]	1.85	−2.77	0.51	0	8	13[a]	9[a]	7[a]	nw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	69.0[b]	−0.9	91[b]	13 †	40[a]	24	40[c]	5.73	+2.19	2.40	0	11	19[a]	5[a]	5[a]		M. Z. White
New Cumberland	Hancock	987	15	65.6	−2.7	86	7 †	39	24	36	5.41	+0.85	1.74	0	11	11	12	7	sw.	M. F. Smith
New Martinsville	Wetzel	634	21	70.2	−1.4	91	28	42	24	39	4.38	+0.54	1.65	0	10	15	9	6	s.	Wm. Ankrom
Parkersburg	Wood	638	26	69.6	−1.9	89	13	47	24	29	4.84	+0.19	1.75	0	11	11	10	9	se.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	63.8	−2.7	88	14 †	38	24	40	1.75	−3.96	0.50	0	12	10	18	2		J. W. Swisher
Philippi	Barbour	1,149	22	68.6	0	92	21	38	24	45	2.17	−2.42	0.61	0	9	17	10	3	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	63.9	−1.6	85	13	37	24	37	5.07	−1.13	1.34	0	12	17	6	7	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29								3.43	−1.49	1.87	0	10				w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7								1.88		0.70	0	7					J. O. Goodman
Smithfield *	Wetzel	835	10	65.6		90	14 †	40	11 †	44	2.93		0.87	0	7	13	5	12	w.	G. M. Whisler
Terra Alta	Preston	2,612	14																	H. C. Shaffer
Wellsburg	Brooke	1,225	20	65.3	−2.5	84	18	41	24	29	4.65	+0.19	2.15	0	11	11	15	4	w.	C. P. Waugh
Weston	Lewis	1,026	26	68.4	−2.7	86[e]	12 †	40[e]	24	41[e]	2.12	−2.49	1.00	0	7	15[f]	6[f]	3[f]		Miss C. M. Davis
Wheeling	Ohio	645	30	68.8		89	28	42	24	40	4.07	+0.21	1.47	0	11	15	10	5	sw.	Miss M. B. Forsyth
Averages and	Extremes			67.6	−1.7	93	18 †	34	24	46	3.41	−1.04	2.90	0	10	15	9	6	w.	
Southern Section.																				
Bancroft	Putnam	574	11	69.4	−2.3	89	13	45	24	39	2.99	−1.57	0.92	0	9	16	0	14	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	66.0	−1.4	85	14 †	39	23	35	7.09	+3.05	1.62	0	6	17	4	9	w.	John A. Ewart
Bluefield *	Mercer	2,558	20	67.0	−1.8	85	14	41	24	34	1.21	−3.94	0.48	0	4	17	5	8		Norfolk & Western Ry.
Charleston	Kanawha	597	29	74.2		95	13 †	46	24	39	2.22	−2.34	0.73	0	9	18	3	9	w.	C. V. Lewis
Clay	Clay	706	0								4.14		1.90	0	6	10	14	6		Prof. E. H. Knabenshue
Cuba *	Jackson *	650	14	68.6	−0.5	89	13	41	24	37	3.41	−0.31	1.02	0	10	9	20	1	w.	C. T. Perry
Dunlow	Wayne	703	7																	L. A. Smith
Elkhorn	McDowell	1,933	22	67.0	−1.7	86	17 †	41	24	34	1.26	−4.04	0.46	0	7	11	16	3	w.	J. J. Lincoln
Evans	Jackson	606	0								5.44		1.35	0	9	13	1	16		B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	67.0	−1.7	92	21	36	24	43	2.24	−1.89	1.15	0	7	20	3	7	w.	W. H. Gwinn
Hinton	do	1,450	25	68.6	−2.4	92	13	43	24	39	2.62	−1.53	1.44	0	10	13	1	16	e.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	67.2		89	13	37	25	49	3.55		1.00	0	11	18	3	9		R. E. Ferguson
Huntington	Cabell	538	19	71.6	−1.1	91	7 †	47	24 †	43	4.87	+0.56	2.13	0	10	16	5	9	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	65.3	−2.4	86	13	38	24	37	4.07	−0.01	2.08	0	9	18	5	7	nw.	Geo. T. Argabrite
Logan	Logan	687	12																	Dr. J. E. McDonald
Madison	Boone	704	9	72.2[i]		92[i]	13			44[i]	4.35	−1.58	1.20	0	10	10[c]	8[c]	7[c]		S. E. Bradley
Marlinton	Pocahontas	2,131	18	61.0	−4.9	80	13	36	24	39	4.46	−0.20	1.18	0	13	7	17	6	sw.	S. L. Brown
Nuttallburg	Fayette	2,252	22	63.5[d]	−4.2	89[d]	13	40[d]	24†	32[d]	2.50	−1.80	0.85	0	6	19[d]	4[d]	3[d]		Miss Donna Tully
Point Pleasant	Mason	553	24	70.4	−2.6	90	7 †	42	24	39	3.35	−1.10	0.90	0	11	11	8	11	sw.	W. D. Holmes
Powellton	Fayette	933	17	70.9[g]		92[g]	13	42[g]	24	40[g]	2.16	−2.54	1.40	0	2	14[b]	14[b]	0[b]		F. L. Evans
Robertsburg	Putnam	574	14	69.4[a]	−2.1	91[a]	7	42[a]	24	43[a]	4.05	+0.06	1.66	0	12	16	5	9		E. C. Brace
Ryan	Roane	700	11	67.9	−1.3	90	28	39	24	41	2.87	−1.36	0.90	0	10	14	9	7		E. C. Brace, Jr
Spencer	do	784	16	67.9		89	5 †	40	24	42	4.59	+0.31	1.10	0	7	14	14	2		A. M. McKown
Sutton	Braxton	839	11	69.6[g]		92[g]	13 †	42[g]	24	41[m]	3.97	−1.90	1.36	0	7	13	9	8		Ben Gillespie
Union	Monroe	2,250	10	65.8[a]	−1.1	87	13	38[a]	24	36[a]	1.97	−2.00	0.70	0	7					J. C. Shanklin
White Sulphur Springs	Greenbrier	1,940	5	64.4		90	13	37	24	37	4.92		1.70	0	10	18	4	8	sw.	J. M. Ayres
Williamson	Mingo	660	13	72.0	−0.3	91	11	50	24	36	5.34	+0.52	1.30	0	9	20	6	4	w.	J. F. Keyser
Averages and	Extremes			68.2	−2.1	95	13 †	36	24	45	3.70	−1.02	2.13	0	9	15	7	8	w.	
State Averages and	Extremes			67.7	−1.8	95	13 †	33	24	49	3.63	−0.88	2.90	0	9	15	8	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for June, 1915.

Stations.	Watershed.	Day of month.																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Section.																																	
ayard	Potomac	T.	1.75	.16	.10				.54				.17	.53	.68	.10	.06	.33		T.	T.	T.	T.				.26			T.	.36		5.04
arlington	do	T.	2.20	.47					.08					.65		.10	T.			T.		T.					.15				.70		4.35
ranklin	do																																
arpers Ferry	do		1.70	2.52				T.					T.		.22		.65				T								T.	.1			5.21
ost City	do																																
artinsburg	do		*	3.70				.03						.70		1.10			.06	.92		.03	.10			.10		.04			.06		5.84
oorefield	do																																
omney	do	T.	1.46	.05				.21				T.		.37	.34		3.06						.06				.06				.35		2.96
pper Tract	do		1.50	.60	T.										.25	.10		.50														2.95
Northern Section.																																	
ens Run	Ohio			1.26				.06				.50		.10		1.12				.21										.88	.94		5.07
randonville	Monongahela	.26	.11	.09					.14				.29	.03	.15		.20				.06				.24		.20				.30		2.07
uckhannon	do	T.	.25	.90								.40				.46				.20									T.	.32		2.53
airo	Little Kanawha			.65				.75					.40	.14	.12	.74	.40													.05	2.90		6.15
entral Station	Middle Is. Creek																																
heat Bridge	Monongahela																																
ortland	do			.62	.08				.13					1.98			.07	.08						.12			.13						3.21
reston	Little Kanawha		.02	.63	.43				.19				.70	.08		.39	.50														.62		3.56
avis	Monongahela		.49	.19	.06				.19				.13		1.10		.06	.02			.18			T.				.09					2.51
lizabeth	Little Kanawha	.04		.40	.37				.40				1.46	.16	.18	.21	.85														.64		3.71
lkins ***	Monongahela	T.	.12	.16				.16	.14			.19	.09	.07	.30	.04	T.	.20		.05		.42					T.			T.	.51		2.45
airmont	do		T.	.53	.02				.18				.50	.02	.52	.07	.34			.07				T.							.14		2.39
lenville	Little Kanawha	T.	.15	.65					T.			.65				.37	.30														.40		2.52
rafton	Monongahela	.02	.10	.32	.05				.15			.48	.03	.75		.11								.16							.58		2.75
ost Creek	do	.03	.57	.73				T.				.28		.10			.57			T.	T.										.51		2.79
lannington	do		.51	.43					.33			.68	T.	.22	.15	.32				.03	T.										.19		2.86
lorgantown	do		.10	.12					.15			.51		.10	.18	.22							T.								.47		1.85
loundsville	Ohio			1.61	.01				.60				.16	*	.60		.04			.16						.06		.09			2.40		5.73
ew Cumberland	do		.07	.80					.56			.10	T.	.81	.36	.45				.20	T.		T.			.22				.10	1.74		5.41
ew Martinsville	do			.50					.18			.70		.70	.04	.85					.11			.05						.20	1.05		4.38
arkersburg ***	Ohio	T.	.22	.04				.23				.48	.01	.11	.79	.97				.37	T.									.43	1.19		4.84
arsons	Monongahela	.05	.10	.01								.03	.01	.25	T.	.40	.50						.10	.05			.01				.24		1.75
hilippi	do	.10	.43	.20				.24				.04			.05	.30						T.	.20							T.	.61		2.17
ickens	do	.05	.76	.81	.14				.30			.37			.66	.30	*			.11	.10	.13									1.34		5.07
owlesburg	do	.15	.12	.04				.44				.38		1.87		.12	.04			.15											.12		3.43
aint Marys	Ohio			.05	.03				.05				.70		.05			.40													.60		1.88
mithfield	Fishing Creek	.12		1.60	T.		.17												T.					23			.34			.60	.87		2.93
erra Alta	Monongahela																																
ellsburg	Ohio		.17	.40					.30			.15		.62	.13	.34				.20	T.						.11			.08	2.15		4.65
eston	Monongahela		.12	1.00						.10		.40		.10			.30				T.												2.12
heeling	Ohio		T.	1.00	.10				.50				.15	.03	.15	.42	.04			.15		T.	T.	T.			.06				1.47		4.07
Southern Section.																																	
ancroft	Great Kanawha		.05	.40					.60			.92	.02			.08	.45			.04												.43		2.99
eckley	do	1.62	.60					1.60					1.48			.33															1.46		7.09
luefield	do														.15	.48			.40			.18											1.21
harleston	do	.07	.17	.32	T.				.25				.73	.03	.04	.05	.56	T.												T.	T.		2.22
lay	do	T.		1.90					.62				.70		T.	.74	.07	T.				.11											4.14
uba	Sand Creek																																
unlow	Big Sandy																																
lkhorn	do	.15							.46				.15		.12	.14	T.			T.		.17								.07			1.26
vans				.37					.98			.50	.69		.05	1.35	T.				T.	.10								.56	.84		5.44
reen Sulphur Spgs	Great Kanawha	.12	T.	.10	T.				.18			.24		1.15		.30															.15		2.24
linton	do	.08	.04	.14	.14				.20				.20		.06	.02	.30		1.44														2.62
olcomb	do	.12	*	*	.35				.81			.28	.10	.14	.45	.32															1.00		3.55
untington	Ohio	.02		.24					.40				1.04		.10	.26	.60			.08										.05	2.08		4.87
ewisburg	Great Kanawha	.27	T.	.39				.13					T.	T.	2.08	.41	.06		.42			.11									.20		4.07
Logan	Guyandotte																																
Madison	Great Kanawha	.20	.05	.30	.05	.40			.91				1.20	.40	.10		.71																4.35
Marlinton	do	.32	.17	1.03	.13			.16					.41	T.	.29	.16			1.18		.06	.02	.26							T.	.27		4.86
Nuttallburg	do	.24	.30						.26				.85			.65				T.											.20		2.50
Point Pleasant	Ohio	.01	.10	.30	.01				.18				.90	.14		1.14	.84					.05								T.	.68		3.35
Powellton	Great Kanawha			.76													1.40																2.16
Robertsburg	do			.12	.04				.23				.97	.27	.06	.14	.38			.08		.05								.05	1.66		4.05
Ryan	do	.01	.23	.03				.11	.12			.72	.24		.20	.31						T.									.90		2.87
Spencer	Little Kanawha	T.	.65	1.10		.85							1.05								.35	.30									.29		4.59
Sutton	Great Kanawha	T.		1.36	.15				.62				.73		T.	.68	.28	T.					.15								T.		3.97
Union	do	T.	.17	T.				T.				.12		.70	.16	.30		.25	.27			T.									T.		1.97
White Sulphur Spgs		.35		.56					.19				.20		.92	.82		.05	1.70			.07									.06		4.92
Williamson	Big Sandy	1.28		.42					.40				1.30		.14	.46	.64					.68									.02		5.34

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‡ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

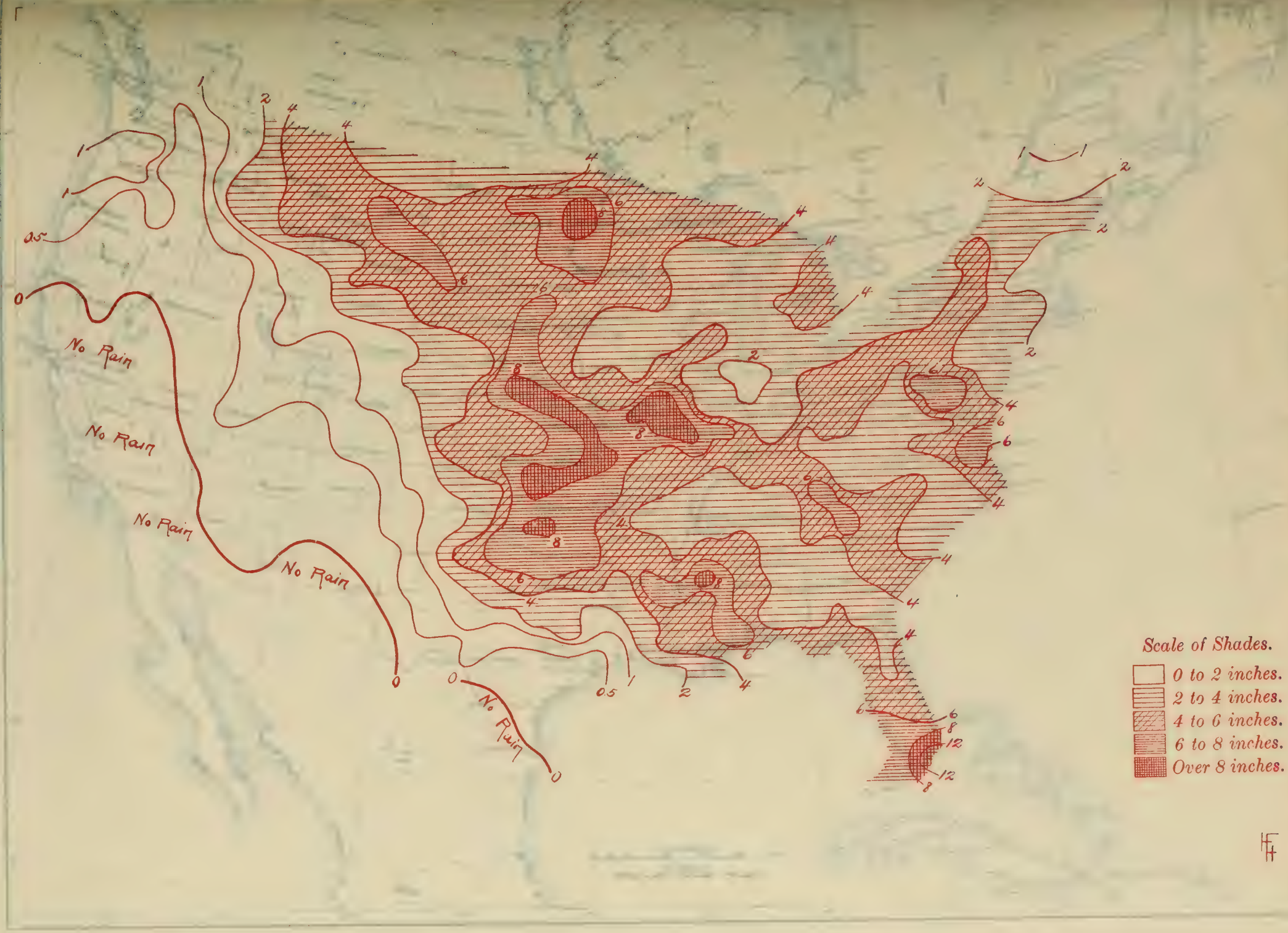
T. Trace, or less than 0.01 inch.

Daily Temperatures for June, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	64	56	55	66	72	73	84	76	70	77	82	84	86	84	80	80	82	84	81	80	75	75	74	71	81	78	78	81	82	79	..	76.3
	Minimum	44	46	15	47	37	39	46	52	41	37	43	54	53	55	58	58	53	47	57	53	54	55	50	33	35	44	41	38	43	45	..	46.8
Burlington	Maximum	67	60	59	68	75	74	84	78	75	76	86	86	83	86	85	81	84	86	85	80	71	82	67	70	79	78	80	80	85	86	..	77.9
	Minimum	54	50	49	49	44	46	50	59	49	45	58	60	61	61	64	59	60	55	64	60	61	53	55	40	41	53	48	45	47	48	..	52.9
Lost City	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Martinsburg§	Maximum	73	59	58	74	82	78	87	79	80	81	91	91	94	91	89	85	90	93	86	85	80	85	71	79	82	84	86	86	91	83	..	82.4
	Minimum	51	52	49	49	49	52	56	59	56	52	58	63	67	67	69	64	66	63	64	64	60	63	51	49	52	59	56	53	56	67	..	57.9
Moorefield	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Romney	Maximum	72	65	62	70	78	79	89	82	78	79	91	91	95	94	91	86	90	92	95	86	77	88	74	80	87	88	93	85	91	89	..	83.9
	Minimum	55	50	50	51	44	48	57	52	52	47	55	61	64	65	65	61	60	55	65	60	60	61	55	42	44	53	51	55	50	63	..	55.0
Upper Tract	Maximum	62	58	57	67	75	75	85	78	79	80	87	88	90	89	83	83	85	80	85	77	76	80	74	76	83	83	84	85	79	78	..	78.7
	Minimum	54	49	50	49	44	45	50	47	47	43	50	60	63	62	63	58	60	53	65	55	62	60	54	38	39	49	48	44	50	62	..	52.4
Northern Section.																																	
Bens Run	Maximum	70	70	65	70	80	83	85	70	75	75	85	85	87	83	85	80	84	88	84	83	82	79	70	76	83	82	81	90	76	76	..	79.4
	Minimum	58	58	58	56	52	54	59	55	54	50	57	62	68	65	62	57	58	59	68	63	62	65	56	44	53	60	54	54	58	62	..	58.0
Buckhannon	Maximum	72	68	65	75	78	80	85	77	74	76	86	85	89	86	78	79	82	89	84	82	82	72	72	80	83	80	86	80	76	..	..	79.4
	Minimum	53	56	51	53	50	47	50	50	50	43	50	52	62	60	62	58	57	52	65	57	58	65	51	38	42	50	49	48	53	60	..	53.1
Central Station	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Creston	Maximum	71	70	73	72	82	87	87	80	80	81	92	87	90	87	74	84	88	89	90	86	85	87	79	80	86	90	89	93	84	79	..	83.4
	Minimum	59	52	60	59	55	56	58	51	52	46	52	60	65	60	64	59	58	56	69	61	61	61	53	43	48	54	53	52	58	63	..	56.6
Elkins	Maximum	68	62	62	74	74	82	86	70	70	76	85	85	89	85	75	78	82	88	82	81	79	76	67	71	80	80	82	85	78	77	..	77.6
	Minimum	54	55	54	53	46	46	51	53	50	44	50	60	61	63	62	60	59	53	63	57	58	63	46	37	40	49	50	47	56	64	..	53.5
Fairmont§	Maximum	75	67	66	82	85	88	89	75	78	80	87	88	90	87	74	85	89	93	86	84	83	82	71	80	85	85	83	91	83	75	..	82.2
	Minimum	53	58	55	54	48	50	53	57	51	45	51	59	64	60	65	60	58	55	63	60	60	63	51	42	46	54	51	49	55	62	..	55.1
Glenville	Maximum	76	71	67	74	80	85	87	87	74	79	78	86	90	89	85	82	85	89	85	85	82	81	75	75	84	85	83	90	89	81	..	82.0
	Minimum	56	51	51	52	57	50	50	58	50	47	51	61	61	55	51	54	58	58	63	62	61	64	52	41	46	53	54	50	56	64	..	54.6
Grafton	Maximum	74	67	66	81	83	87	89	82	75	82	86	89	91	89	76	86	89	92	88	82	84	81	75	78	84	83	84	93	86	78	..	82.7
	Minimum	52	57	55	55	42	49	54	58	51	46	52	59	63	60	65	59	59	50	61	61	59	62	51	42	44	54	50	47	53	64	..	54.5
Lost Creek	Maximum	75	70	63	77	80	84	87	76	70	68	75	86	88	83	81	86	89	90	87	79	85	82	72	76	85	85	80	89	83	76	..	80.2
	Minimum	53	58	55	56	55	60	65	58	43	45	50	57	62	58	56	55	65	53	71	57	62	64	49	34	42	45	42	46	52	63	..	54.4
Mannington	Maximum	72	68	64	76	78	81	85	78	74	74	83	81	85	83	80	79	84	87	84	80	79	80	73	73	81	82	81	87	79	75	..	78.9
	Minimum	52	57	55	54	45	47	49	56	48	43	53	57	62	29	65	57	54	53	68	58	58	60	49	38	44	56	47	45	52	63	..	53.5
Morgantown	Maximum	71	66	62	78	74	83	..	69	71	72	80	86	87	86	82	82	86	89	84	81	77	79	72	74	84	80	9	85	83	75	..	78.4
	Minimum	62	54	54	52	52	55	..	55	50	45	56	62	67	65	64	59	57	56	68	59	58	65	53	41	48	57	50	55	62	63	..	56.7
New Cumberland	Maximum	79	69	62	74	77	80	86	82	74	75	80	83	86	84	74	80	84	86	84	77	75	79	70	75	81	82	79	81	79	73	..	78.3
	Minimum	48	54	54	46	43	48	50	52	44	41	56	60	66	61	62	50	52	55	64	58	52	58	50	39	54	56	50	51	53	62	..	53.0
New Martinsville	Maximum	75	74	68	81	84	87	89	84	77	81	87	87	89	88	81	84	87	90	87	85	85	84	82	79	83	86	87	91	84	77	..	83.4
	Minimum	55	59	58	57	52	52	54	57	52	47	55	60	66	61	64	57	56	57	69	63	61	63	53	42	50	61	52	52	56	65	..	56.9
Parkersburg	Maximum	70	70	70	73	80	84	87	70	76	78	87	85	89	83	75	80	85	87	83	80	82	78	69	75	83	82	82	87	78	80	..	79.6
	Minimum	62	60	60	58	56	56	62	54	56	50	59	62	66	62	62	57	58	61	69	66	63	64	55	47	54	60	58	60	66	65	..	59.6
Parsons	Maximum	69	64	62	70	76	80	84	70	76	75	80	85	86	88	88	79	83	87	82	82	78	76	70	73	78	79	81	83	84	78	..	78.2
	Minimum	50	52	52	45	43	40	51	54	43	45	47	48	47	49	48	60	61	53	60	62	57	54	45	38	39	42	43	45	45	62	..	49.3
Philippi	Maximum	78	74	76	81	80	83	89	85	90	81	82	80	89	90	75	84	85	89	87	90	92	80	78	75	83	89	90	90	85	77	..	83.6
	Minimum	58	53	54	58	46	45	47	48	50	44	52	54	58	61	63	58	60	58	54	60	59	62	54	38	48	44	51	55	51	63	..	53.5
Pickens	Maximum	62	67	57	67	77	80	82	73	74	75	84	78	85	80	68	77	78	81	79	77	76	72	66	67	80	76	79	81	75	72	..	74.8
	Minimum	56	56	51	51	47	45	52	51	49	51	50	55	61	61	60	55	53	52	61	56	58	60	48	37	43	50	51	53	60	58	..	53.0
Terra Alta	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Wellsburg	Maximum	70	63	60	72	76	78	81	75	70	71	78	80	82	79	73	75	80	84	78	76	75	75	68	70	76	75	76	80	78	71	..	74.8
	Minimum	51	55	54	50	50	54	58	53	48	45	57	64	67	62	63	53	56	60	67	60	56	63	52	41	52	54	51	54	60	63	..	55.8
Weston§	Maximum	74	70	..	..	..	78	84	72	70	84	84	86	..	..	86	84	82	86	84	80	82	80	74	76	86	84	80	86	78	80	..	80.4
	Minimum	56	58	56	..	..	58	60	56	46	60	64	60	..	..	62	60	56	70	60	62	44	50	40	45	52	50	48	56	60	56	..	56.4
Wheeling§	Maximum	75	64	64	82	85	87	87	79	78	78	86	85	88	87	75	87	88	88	86	84	80	83	72	77	85	83	85	89	83	75	..	81.5
	Minimum	54	59	57	55	51	53	54	56	50	46	50	64	67	63	67	57	56	59	62	63	59	63	54	42	45	57	51	52	56	60	..	56.1
Southern Section.																																	
Beckley	Maximum	79	75	75	73	78	79	71	78	79	81	83	84	84	85	84	81	84	81	85	85	81	78	76	85	79	82	82	83	82	80	..	79.9
	Minimum	51	54	53	51	46	45	45	48	44	46	50	60	63	62	58	58	50	58	57	56	56	52	39	44	47	52	53	54	52	61	..	52.2
Bluefield	Maximum	58	67	69	71	74	77	83	81	70	78	84	83	82	85	82	80	82	82	84	82	80	78	75	74	80	82	83	83	75	78	..	78.1
	Minimum	54	51	63	53	54	50	49	55	47	48	55	63	61	62	63	60	58	55	65	56	62	67	54	41	47	54	53	54	65	64	..	57.8
Charleston	Maximum	75	73	82	80	88	91	94	87	79	82	92	90	95	93	76	86	89	93	92	90	90	87	82	83	89	92	91	95	91	84	..	87.0
	Minimum	61	54	66	63	64	63	70	59	54	64	62	67	67	69	68	64	63	61	70	64	66	66	53	46	50	54	60	58	61	68	..	61.5
Elkhorn	Maximum	62	68	71	71	73	80	83	81	70	77	82	82	83	81	80	81	86	85	85	84	82	79	77	73	80	81	81	83	77	76	..	78.5
	Minimum	54	53	55	52	54	47	58	55	51	46	50	59	58	52	63	58	57	58	64	56	64	67	52	41	46	52	54	61	66	61	..	55.5
Green Sulphur Spgs.	Maximum	62	65	65	75	76	81	87	75	73	87	86	89	84	83	83	82	87	86	86	84	92	82	73	77	84	87	85	86	78	78	..	80.6
	Minimum	54	54	53	53	52	50	52	56	51	45	59	60	62	45	61	57	59	55	56	55	59	62	50	36	41	46	50	51	59	59	..	53.4
Hinton§	Maximum	63	67	67	73	78	85	89	70	78	83	90	87	92	86	87	84	88	86	89	87	88	85	75	70	85	87	86	87	79	80	..	81.7
	Minimum	56	46	48	55	52	51	51	60	50	51	51	54	64	65	65	60	62	58	59	60	62	64	53	43	48	48	56	56	58	60	..	55.5
Holcomb§	Maximum	66	72	69	68	80	85	87	70	71	78	86	88	89	85	74	81	85	87	83	84	83	78	80	83	86	85	83	86	84	76	..	80.4
	Minimum	55	55	49	52	48	63	60	54	47	46	50	57	55	59	60	55	57	62	60	52	58	63	48	50	37	43	50	56	57	60	..	55.9
Huntington§	Maximum	71	75	80	79	84	87	91	73	78	81	87	86	91	84	76	84	89	90	88	83	84	85	78	79	85	88	87	90	77	84	..	83.1
	Minimum	61	60	60	60	60	58	64	56	55	50	56	65	69	65	67	60	62	61	66	66	67	67	57	47	50	56	61	47	67	66	..	60.2
Lewisburg	Maximum	69	63	61	67	72	78	85	66	69	77	84	85	86	85	81	80	83	84	84	83	78	78	70	74	79	83	83	82	76	78	..	77.4
	Minimum	54	53	53	52	55	45	52	50	43	44	47	59	59	64	61	60	57	55	55	55	61	63	54	38	43	48	51	52	56	56	..	53.2
Madison	Maximum	..	..	..	85	85	88	90	74	77	81	90	88	92	87	76	84	89	..	91	88	88	85	..	..	85	89	87	..	..	..	..	85.7
	Minimum	60	..	..	..	58	53	60	55	55	54	55	56	62	65	68	63	64	60	..	62	66	67	52	..	..	45	58	56	..	..	..	..	58.8
Marlinton	Maximum	56	58	55	62	68	72	78	70	66	74	79	77	80	78	74	75	77	76	78	76	72	71	64	70	72	77	76	75	67	68	..	71.4
	Minimum	50	50	52	48	52	44	50	57	44	42	40	56	58	58	61	56	55	52	58	52	60	56	50	36	37	46	49	46	49	56	..	50.7
Point Pleasant	Maximum	76	77	76	77	82	87	90	77	78	79	90	88	90	87	83	81	86	88	87	82	87	84	78	78	85	89	87	90	85	83	..	83.6
	Minimum	59	56	56	59	54	52	62	51	58	44	55	60	67	60	64	66	58	57	69	61	61	62	50	42	19	53	55	51	64	64	..	57.3
Powellton	Maximum	..	75	75	77	84	..	90	..	88	85	91	88	92	89	89	85	87	91	89	..	..	..	81	80	86	89	88	91	88	..	..	85.9
	Minimum	..	58	52	59	53	..	55	..	49	47	53	62	63	63	64	59	60	58	66	..	..	..	53	42	16	52	55	53	63	..	..	55.9
Robertsburg§	Maximum	70	79	75	75	85	89	91	74	75	80	80	89	90	85	75	85	87	89	85	85	85	80	74	85	85	..	85	90	85	80	..	82.5
	Minimum	59	55	56	59	55	51	62	52	51	48	44	60	65	60	65	58	57	57	67	61	63	64	49	42	47	52	..	51	62	63	..	56.4
Ryan	Maximum	70	71	77	72	81	83	85	70	66	72	87	87	88	88	77	80	84	88	88	84	82	85	75	76	82	85	85	90	83	83	..	80.8
	Minimum	58	56	57	52	51	49	50	55	51	42	51	59	64	60	61	60	56	55	65	58	59	60	59	39	44	49	52	49	65	63	..	55.0
Spencer§	Maximum	75	79	70	79	89	70	76	77	70	76	85	85	89	85	70	80	83	88	88	82	81	72	74	80	88	88	84	89	82	76	..	80.3
	Minimum	55	60	50	54	59	55	50	50	51	50	57	58	67	60	65	60	55	55	68	60	61	51	50	40	46	52	54	52	56	63	..	55.5
Union§	Maximum	59	62	65	70	72	80	81	67	70	77	84	83	87	82	82	81	83	83	82	82	78	78	70	73	80	82	84	84	75	78	..	77.1
	Minimum	..	53	54	52	52	54	46	58	45	44	49	59	60	64	61	60	56	57	60	55	62	63	53	38	44	49	54	55	59	61	..	54.4
White Sulphur Spgs.	Maximum	59	61	61	64	71	75	82	79	71	76	82	80	90	81	79	76	80	79	83	80	77	78	73	74	78	81	82	77	75	74	..	75.9
	Minimum	54	53	53	51	53	46	51	59	44	44	45	59	54	64	60	61	57	54	59	54	60	62	56	37	41	47	50	52	54	53	..	52.9
Williamson§	Maximum	72	75	78	80	83	86	89	71	76	81	91	85	90	85	72	82	85	89	87	86	83	83	76	77	84	87	87	89	85	78	..	82.4
	Minimum	59	60	61	58	59	57	61	61	56	55	55	65	68	68	68	64	65	62	65	65	67	70	67	50	52	56	61	60	61	68	..	61.5

§ Instruments are read in themorning: the maximum temperature then read is charged to thepreceding day, on which it almost always occurs.

Total Precipitation, Inches, June, 1913.



E Flach

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS
AUG 25 1915

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JULY, 1915

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JULY 20, 1915

Departure of the Mean Temperature from the Normal, July, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIII. PARKERSBURG, W. VA., JULY, 1915. NO. 7.

GENERAL SUMMARY.

July was characterized by frequent and unfavorably distributed rainfall, abnormally low temperatures, and an excess in cloudiness. Measurable amounts of precipitation were received on an average of 13 days and there were but two short periods of uncomfortably warm weather. Although cool and showery, crops made rapid growth during the warmer periods of the month. The wheat yield was large and pastures were in fine condition, but apples were scarce and the hay crop only fair, with the prospects generally excellent for corn, potatoes, oats, peaches, and berries. The month was unfavorable for wheat and hay harvesting.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 29.99 and 29.98 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.21 inches on the 26th, and 29.70 inches on the 2d. Elkins, 30.25 inches on the 24th, and 29.70 inches on the 1st.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 71.9°. The mean departure from the normal for 38 stations having ten or more years of record was minus 1.5°. Cool weather prevailed until the 12th, especially on the 5th, 6th, and 9th. A reading of 38°, with a light frost occurred at Philippi on the 9th, and a light frost occurred at Davis on the same date. The temperatures were somewhat above the normal from the 12th to the 19th, the highest readings of the month occurring at many of the stations during that period, while unseasonably cool weather prevailed from the 21st to the 24th. The highest readings of the month occurred at about one-half of the stations on the 31st.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 82 per cent; 8 p. m., 67 per cent. The July averages for the same hours for the past 26 years are 79 and 67 per cent, respectively. Elkins, 8 a. m., 87 per cent; 8 p. m., 76 per cent. The July averages for Elkins for the same hours for the past 14 years are 87 and 78 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 55 stations reporting, was 4.63 inches. The mean departure from the normal for 45 stations having ten or more years of record was minus 0.03 of an inch. The rainfall was heaviest over Ritchie and portions of Wetzel counties and from the south-central section northeastward over the middle mountain counties. The falls were generally much deficient over the eastern panhandle section and thence westward into the mountain districts, and over the central and northern portions of the Monongahela basin. The heaviest rainfalls were recorded on the 2d, 5th, 8th, 16-17th, and 29-30th, but showers occurred daily in many sections from the 1st to the 5th, 8th to the 12th, 15th to the 22d, and 29th to the 31st. Hail damaged crops considerably in sections of Mineral county on the 23d. The rivers were at good boating stages during the month.

WIND.

The average wind velocity at Parkersburg was 4.4 miles per hour, or 0.1 of a mile below the July average for 25 years. The average at Elkins was 3.1 miles per hour, or 0.1 of a mile above the July average for 15 years. The highest velocity at Parkersburg was 34 miles per hour from the north on the 31st, and at Elkins 15 miles per hour from the southwest on the 11th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 51 per cent of the possible amount, or 11 per cent below the July average for 17 years. The average at Elkins was 45 per cent, or 9 per cent below the July average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 6th, 7th, 14th, 18th, 22d, 23d, 24th, 26th, and 28th; Davis, 27th; Elkins, 7th, 9th, 10th, 13th, 18th, 22d, 23d, 24th, 26th, and 27th; Grafton, 4th, 6th, 7th, 9th, 10th, 11th, 14th, 20th, 21st, 22d, 23d, 24th, 25th, 27th, 28th, and 29th; Hinton, 14th, 18th, and 23d; Mannington, 4th, 7th, 9th, 10th, 13th, 18th, 22d, 23d, 24th, 27th, and 28th; New Cumberland, 13th, 14th, 18th, 22d, 24th, and 25th; Philippi, 23d, 24th, and 27th; Romney, 22d, 23d, 24th, 25th, 26th, and 27th; Rowlesburg, 9th, 13th, 18th, and 22d; Wheeling, 14th, 18th, 24th, 27th, and 28th; Williamson, 9th, 10th, 14th, 22d, 23d, 26th, and 28th.

Frost, light: Davis and Philippi, 9th.

Hail: Burlington, 23d; Charleston, 21st; Lost Creek, 21st; Romney, 22d.

Halo, solar: Philippi, 12th; Wellsburg, 14th.

Haze, light: Bayard, 14th, 25th, and 26th; Philippi, 20th.

Thunderstorms (dates and number of stations reporting): 1st, 5; 2d, 1; 3d, 4; 4th, 4; 8th, 3; 11th, 2; 12th, 1; 13th, 1; 15th, 13; 16th, 9; 17th, 7; 18th, 1; 19th, 8; 20th, 7; 21st, 10; 22d, 1; 23d, 3; 26th, 2; 27th, 1; 28th, 2; 29th, 8; 30th, 10; 31st, 5.

COMPARATIVE DATA FOR JULY.

Year.	Temperature.			Precipitation.
	Mean.	Highest.	Lowest.	
1891	67.5	..	....	5.59
1892	73.4	98	41	4.20
1893	73.8	98	42	2.96
1894	73.3	100	36	2.21
1895	70.5	99	39	4.35
1896	73.3	97	46	9.07
1897	74.2	102	46	5.43
1898	75.0	103	40	4.46
1899	73.3	100	33	3.78
1900	74.7	104	41	4.38
1901	77.4	104	47	3.16
1902	74.2	104	45	3.54
1903	72.5	100	37	3.74
1904	71.5	97	42	3.28
1905	75.3	98	43	5.92
1906	72.4	98	45	4.54
1907	72.7	98	42	6.66
1908	74.0	100	41	5.21
1909	70.2	96	36	4.17
1910	73.8	98	41	4.92
1911	73.3	106	40	2.82
1912	72.0	100	45	7.48
1913	74.2	103	40	5.80
1914	75.1	106	38	4.11
1915	71.9	99	38	4.63
Entire period	73.0	106	33	4.66

Climatological Data for July, 1915.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Section.																				
Bayard	Grant	2,500	12	67.4	−0.4	90	31	39	9	42	3.55	−1.58	0.74	0	10	14	10	7	w.	Solomon Clark
Burlington	Mineral	875	20	71.7	−1.2	98	31	47	9	34	3.84	+0.21	1.69	0	11	3	27	1	w.	J. W. Vandiver
Franklin	Pendleton		8																	Miss Evelyn Calhoun
Harpers Ferry	Jefferson	244	25								1.87	−1.44	1.05	0	7				w.	S. W. Lightner
Lost City	Hardy		8																	B. D. Hinegardner
Martinsburg	Berkeley	435	23	76.0	+0.6	97	19	54	11	34	3.20	−0.77	1.30	0	10	9	18	4	nw.	G. W. Van Metre, C. E.
Piedmont	Mineral	919	0	74.0		95	31	53	9	30	2.98		0.57	0	16	11	8	12	nw.	C. A. Suter, Jr
Romney	Hampshire	824	17	75.4	+0.3	99	19	48	9	48	3.32	−0.26	0.79	0	11	5	26	0		Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	71.2	−1.2	95	16	44	10	38	1.82	−2.05	0.65	0	8	23	8	0		J. M. Mallow
Averages and	Extremes			72.3	−0.4	99	19	39	9	48	2.93	−0.98	1.69	0	10	11	18	2	w.	
Northern Section.																				
Bens Run	Pleasants	622	13	73.4	−1.8	94	31	56	6 †	30	4.90	+0.13	1.20	0	11	17	11	3		J. D. Riggs
Brandonville	Preston	1,809	1								6.83		1.01	0	13					W. T. Miller
Buckhannon	Upshur	1,411	24	69.7	−2.7	90	31	45	22	35	4.78	−0.63	0.85	0	13	17	3	11		H. A. Darnall
Cairo	Ritchie	674	12	72.3	−2.1	90	21	51	6 †	27	11.31	+7.21	2.18	0	22	2	21	8	w.	Van A. Zevely
Central Station	Doddridge	950	12																	G. W. Sherwood
Cheat Bridge	Randolph	3,600	1																	Franz A. Degler
Cortland	Tucker	3,300	1								4.48		0.70	0	15					Samuel Harmon
Creston	Wirt	701	13	74.6	−0.1	97	19 †	51	9	38	4.24	+0.41	0.94	0	16	10	9	12	sw.	J. M. Reed
Davis	Tucker	3,093	7								4.84		0.78	0	19	11	7	13	sw.	Ross C. Male
Elizabeth	Wirt	646	4								4.44		1.00	0	14					E. D. Ball
Elkins	Randolph	1,940	15	69.0	−1.5	91	31	46	9	35	3.40	−1.24	0.61	0	19	3	13	15	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	73.3	−1.0	97	31	49	6	36	4.12	−0.75	0.86	0	14	19	5	7	w.	F. P. Hall
Glenville	Gilmer	738	25	73.4	−1.3	95	31	51	9	34	4.85	−0.65	1.50	0	11	12	3	16	s.	M. T. Brannon
Grafton	Taylor	1,000	22	72.4	−0.6	96	31	49	9	36	2.98	−2.11	0.58	0	10	15	8	8	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	71.2	−1.2	93	31	46	10	37	3.07	−1.81	0.71	0	12	12	8	11	w.	Allen Smith
Mannington	Marion	974	12	70.5	−2.1	92	31	47	6	33	3.13	−1.77	0.73	0	16	9	14	8	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	71.8	−1.8	94	14	50	9	32	3.54	−1.76	0.96	0	9	8	15	8		Prof. Edgar L. Andrews
Moundsville	Marshall	642	12																	M. Z. White
New Cumberland	Hancock	987	15	70.9	−2.2	92	18	48	6 †	36	3.88	−0.58	1.04	0	13	6	19	6	w.	M. F. Smith
New Martinsville	Wetzel	634	21	73.8	−1.8	95	31	52	6	38	4.47	−0.46	1.12	0	13	12	16	3	s.	Wm. Ankrom
Parkersburg	Wood	638	26	73.7	−1.8	94	31	55	6	27	4.21	−0.45	1.11	0	17	9	15	7	se.	U. S. Weather Bureau
Parsons	Tucker	1,656	15																	J. W. Swisher
Philippi	Barbour	1,149	22	72.0	−0.9	93	31	38	9	47	3.65	−1.55	1.01	0	14	14	8	9	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	65.8	−3.2	82	16 †	46	6 †	29	6.30	+0.05	1.28	0	15	12	12	7	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29								5.32	+0.35	0.86	0	17				w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7								5.24		1.34	0	10					J. O. Goodman
Smithfield	Wetzel	835	10	72.6		96	31	42	5	48	7.22	+2.01	1.41	0	14	15	7	9	w.	G. M. Whisler
Terra Alta	Preston	2,612	14																	H. C. Shaner
Wellsburg	Brooke	1,225	20	70.1	−1.8	86	31	52	6 †	25	6.05	+1.40	0.93	0	14	8	13	10	w.	C. P. Waugh
Weston	Lewis	1,026	26	70.8[a]	−4.1	90[a]	15 †	50[a]	8	34[b]	6.26	+1.42		0	16	9[a]	8[a]	13[a]	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	73.0		93	18	52	6	35	4.49	−0.18	1.00	0	15	12	7	12	s.	Miss M. B. Forsyth
Averages and	Extremes			71.7	−1.8	97	19 †	38	9	48	4.92	−0.05	2.18	0	14	11	11	9	w.	
Southern Section.																				
Bancroft	Putnam	574	11	73.8	−1.8	96	16 †	52	23 †	34	3.75	−0.80	1.52	0	12	17[a]	1[a]	12[a]		R. E. Dent
Beckley	Raleigh	2,440	15	69.7	−1.8	89	13 †	47	6 †	35	4.72	+0.93	1.17	0.0	8	15	7	9	w.	John A. Ewart
Bluefield	Mercer	2,558	20	70.3	−1.6	90	31	48	6	29	5.18	−0.36	1.35	0	13	15	12	4		Norfolk & Western Ry.
Charleston	Kanawha	597	29	76.6	+0.2	98	31	52	23	35	4.54	+0.48	1.00	0	12	15	4	12	w.	C. V. Lewis
Clay	Clay	706	0								5.14		1.05	0	13	13[a]	6[a]	11[a]		Prof. E. H. Knabenshue
Cuba	Jackson	650	14	72.5	−0.8	99	29	48	9	36	3.30	−0.92	0.67	0	13	9	11	1	w.	C. T. Perry
Dam 22 O. R.	Jackson	538									4.00		1.42	0	14					U. S. Engineer Office
Dunlow	Wayne	703	7																	George Damron
Elkhorn	McDowell	1,933	22	71.4	−0.8	91	31	53	7	28	7.54	+2.09	2.91	0	14	8	21	2	w.	J. J. Lincoln
Evans	Jackson	606	0								5.32		0.79	0	16	15	4	12		B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	70.8	−1.7	93	30 †	46	6	35	3.30	−0.38	0.70	0	8	20	5	6	ne.	W. H. Gwinn
Hinton	do	1,450	25	73.4	−1.1	95	31	52	6	33	3.34	−0.29	0.74	0	11	15	1	15	se.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	69.4		92	12	46	6	38	6.47		2.23	0	14	18	1	12		R. E. Ferguson
Huntington	Cabell	538	19	75.2	−1.5	95	15	55	6 †	29	4.74	+0.24	1.64	0	15	19	1	11	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	69.5	−1.9	90	31	46	6	32	3.95	−0.05	0.84	0	10	19	6	6	nw.	Geo. T. Argabrite
Logan	Logan	687	12																	W. H. Oliver, Jr
Madison	Boone	704	9	75.2[b]		94[b]	15 †	55[b]	6	31[d]	6.19	+1.94	1.40	0	19	10[b]	14[b]	5[b]		S. E. Bradley
Marlinton	Pocahontas	2,131	18	65.0	−4.2	88	30	42	6	30	3.90	−1.02	0.51	0	19	2	25	4	sw.	S. L. Brown
Nuttallburg	Fayette	2,252	22	67.5	−3.9	85	19 †	49	6	35	5.70	+1.23	1.15	0	10	14	10	2		Miss Donna Tully
Point Pleasant	Mason	553	24	74.2	−2.5	97	31	50	9	37	3.89	−0.18	0.90	0	15	16	8	7	ne.	W. D. Holmes
Powellton	Fayette	933	17	74.5[c]	+0.4	96[c]	19	49[c]	6	36[c]	2.55	−2.17	1.75	0	3	18[c]	10[c]	0[c]		F. L. Evans
Robertsburg	Putnam	574	14	73.2	−2.7	96	18 †	51	6	34	4.88	+0.98	1.42	0	13	15	5	11		E. C. Brace
Ryan	Roane	700	11	73.2	−0.1	98	31	47	7 †	41	3.88	−0.90	1.53	0	14	10	16	5		Wm. E. Ryan
Spencer	do	784	16	71.1		93	30	49	6 †	36	5.18	+0.61	1.20	0	11	6	22	3		A. M. McKown
Sutton	Braxton	839	11	73.8[m]		95[m]		50[m]	6	35[n]	5.72	+0.85	2.20	0	9	11	17	3		Ben Gillespie
Union	Monroe	2,250	10	69.0[d]	−1.9	88[d]	19	50[e]	5 †	34[d]	7.08	+2.70	2.25	0	10					J. C. Shanklin
White Sulphur Springs	Greenbrier	1,940	5	68.4		88	31	44	6	32	3.21		0.98	0	12	16	9	6	sw.	J. M. Ayres
Williamson	Mingo	660	13	75.4	−0.4	94	29	55	6	29	4.79	+0.16	1.51	0	12	17	7	7	w.	J. F. Keyser
Averages and	Extremes			72.0	−1.6	99	29 †	42	6	41	4.74	+0.30	2.91	0	12	14	9	8	w.	
State Averages and	Extremes			71.9	−1.5	99	19 †	38	9	48	4.63	−0.03	2.91	0	13	12	11	8	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. * Received too late to be included in means and summaries.

Daily Precipitation for July, 1915.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Section.																																	
Bayard	Potomac	.44	.12	T.	T.	.33		T.	.22		T.	.25	.74			T.	.42	.17		T	.22	T.		T.				T.	T	T.	.64		3.55
Burlington	do		T.	T.	.25				.10			.72	16		T.	T.	T.			.20	.10	.20	.25	1.44		T.				.22	.30		3.84
Franklin	do																																
Harpers Ferry	do	T.			T.	T			.22			.55	.50			T.	.09			.34		.05								.12		1.87
Lost City	do																																
Martinsburg	do			T.		.08			.10			.85	.06			.05				1.30	.06	T.	T.				.10			.52	.08		3.20
Piedmont	do		.15	.03	.04	.01			.27			.27				.37	.22			.11	.10	.14	.10	.22				.07		.31	.57		2.98
Romney	do				.35	.13			.17			.79	.14			.07	.05			T	.15	.08	T.			.75	*			.64			3.32
Upper Tract	do	.10	.10	.20					.10			T.								T.	.65	T.	.30	.17							.20		1.82
Northern Section.																																	
Bens Run	Ohio		1.20	.45		.19			.75		.01	.08	.83				.82										.12			.16		.29	4.90
Brandonville	Monongahela	.37	.21		.48	.14			.87				.40				.15	.96				1.01						.57		.07	.65	.94	6.83
Buckhannon	do	T.	.34	.32	.10	.17		.33			.22	.12	T.				.66	.22			T.	.54					.25		T.	.85	.66	T.	4.78
Cairo	Little Kanawha	.52	.62	.12	.18	.75	0.02		1.18	.02	.03	.44	.08				2.18	1.90	2.00	.04		.06	.16	.02						.04	.72	.18	.05	11.31
Central Station	Middle Is. Creek																																
Cheat Bridge	Monongahela																																
Cortland	do	.70		2.21			.41			.35			.29	.39			.08	.36	.05		.70		.21	.12					.09		.41	.11	4.48
Creston	Little Kanawha	.10	.21		.18	.35			.72	.22		.12	.08			.10	.51	.10				.02	.05							.55	.53	.40	4.24
Davis	Monongahela	.31	.01	.20	.05	.36			.10	.32			60	.08			.45	.78	.05	.17		.09	.18	.06				T.		.33	.65	.05	4.84
Elizabeth	Little Kanawha	.15	.48		.21	.35			.54	.05		.14	.68				1.00	.12			.12									.57	.25	.38	4.44
Elkins ***	Monongahela	.05	0.08	.12	.10	.17		T.	.32		.16	.56	.14			.24	.37	.23		.02	.13	.05					.02		.02	.44	.38		3.40
Fairmont	do	.40	.46	.44	.21	.28			.55	.12			.31			.03	.65	.20										.01		.11	.35		4.12
Glenville	Little Kanawha		.42	.12		.25			.41		.40	.10				.25	1.00					.40	T.							1.10	.40		4.85
Grafton	Monongahela		.58	.25	.03	.31			.44		.03					.14		.42												.58	.20		2.98
Lost Creek	do	T.	.40	.25		.18			.35		.09	T.	T.				.40	.25	.05	T.		.08					.04		T.	.71	.27		3.07
Mannington	do	.01	.48	.17		.34			.72		.01	.07	.22			.01	.73	.02		T.	.01	.02					.10			.16	.06		3.13
Morgantown	do		.96	.18					.96			T.				.15	.26			T.		.08								.18	.42	.35	3.54
Moundsville	Ohio																																
New Cumberland	do	T.	.41	.08		.37		T.	.42			.48				1.04	.26			T.	T.	.06					.02	.22	.10	.04	.38	T.	3.88
New Martinsville	do		1.12	.77	.10	.15			.40			.05				.02	1.08					.05					.27			.28	.15	.03	4.47
Parkersburg ***	Ohio	.27	.34	.27	.05	.08		T.	1.11		T.	.10	T.			.15	.23	.04		.09	.01	T.					.02		.13	.82	.07	.43	4.21
Parsons	Monongahela																																
Philippi	do	.03	.18		.05	.28					.24	.25	.08				1.01	.14		.14	.03	.39					T.	T.	T.	.66	.17		3.65
Pickens	do	.23	.16	.52	.24	.17			.65		.31	.45				.27	.39	1.28			.43	.20								.46	.50		6.30
Rowlesburg	do	.42	.20	.12	.20	.76			.08	.44		.04	.06	.34			.52	.60	.38		.02		.42							.06	.86		5.32
Saint Marys	Ohio	1.08		.68	.30	.50			.45			.32					.54	.84											T.		.45	.08	5.24
Smithfield	Fishing Creek	.13	.54	.67	.34	1.30		.72				.24	.46			T.		.65	.76	.12			.14								.18	.67		7.22
Terra Alta	Monongahela																																
Wellsburg	Ohio		.71	.40		.34			.42			.71				.60	.80	.01		.01	.42								15	.22	.93	.33	6.05
Weston	Monongahela	.18	.36		.10	.56				.34		.48	.40				*	1.70	.30		.10	.30					.10		.10	.44	.50		2.26
Wheeling	Ohio	.36	.65	.20	.25	.30			.15	.02		.20	.05			.25	1.00	T.		T.		.56	.01					T.	T.	.32	.17		4.49
Southern Section.																																	
Bancroft	Great Kanawha	.44	.19		.37	.23			1.52	.07		.25										.23						.09		.19	.13	.04	3.75
Beckley	do		.32	.38		.68						.89			.16		.65				4	1.17											4.72
Bluefield	do	.30	.42	.20	.04				.25		.02	.38				.20	.05	.45			1.35	.36										.16		4.18
Charleston	do	.30	.30		.10	.33			1.00			.30					.65	.04			T.	.50	.84								.14	.04		4.54
Clay	do	.12		.04	.10			.70		.10	.25					.30		1.05			.50	.65					.10			.23	1.00		5.14
Cuba	Sand Creek	.50	.17	.21		.12		T.	.56			.08				.18	.24				T.	.10					T.	.03	.14	.55	.42		3.30
Dam 22 O. R.	Jackson	.14	1.42		.20	.22			.32	.02		.14						.08			.04	.08	.02								.60	.52	.20	4.00
Dunlow	Big Sandy																																
Elkhorn	do	.09	.02	.32	T.	1.05			.46		.45	.23	T.	.11		.16		1.00			2.91	.15		.20							.38		7.54
Evans		.54	.21	.18	T.	.49			.71		.25	.28				.20	.24			.25	.03	T.						.13	.21	.68	.79	.13	5.32
Green Sulphur Spgs.	Great Kanawha	.50	T.	.40	.05	.70			.61				.12			.62								.30									3.30
Hinton	do	.18			.36	.40			.02	.30		.06	.16		.44		.42					.26										.74	3.34
Holcomb	do	.36		.29	*	.37			.65			.50				T.	.06	.60	.22	*	2.23	.51					.23				.45		6.47
Huntington	Ohio	.10	.76		17	.36			1.64			.22					.10	.02	.29		T.	.25	.04					.02		.54	.14	.11	4.74
Lewisburg	Great Kanawha	.45	T.	.24	.57	.37			.84		.03					.39		.20			.62	T.		.24						T.	T.		3.95
Logan	Guyandotte																																
Madison	Great Kanawha		.92	.02	.15	.44		1.40	.21	.03		.16	.31	.03		.03	.10	.12	.22		.90	.55	.10							.02		.48	6.19
Marlinton	do	.08	.02	.33	.16	.02			49		.06	.08		.04		.39	.18	.43		T.	.30	.03	T.	.03				.33	T.	.09	.51	.03	3.90
Nuttallburg	do	.70	.20	.30	T.				1 15		T.			.55		1.15					.25	.30					.50				.60		5.70
Point Pleasant	Ohio		.40	.22		.23			.55	.03		.50	.02			.10	.08	.20				.02						.10		.90	.16	.38	3.89
Powellton	Great Kanawha			.40												.40						1.75											2.55
Robertsburg	do	.10	.42		.20	.40			1.02	.05		.65				.19	.05					.08								1.42	.06	.24	4.88
Ryan	do	T.	.12	.17				.01	1.53		.04	.30				.06		.15		T.	.09	.01							.06	.74	.56	.04	3.88
Spencer	Little Kanawha	.37	1.20		.25	.45			.65				.45			.50			.05											.62	.30	.34	5.18
Sutton	Great Kanawha	.61	.35			.35			.60	T.			.30						2.20											.46	.15	.70	5.72
Union	do	T	T.	.20	1.00				.30			T.	.20	.85		2.25				.43	.20	.15								1.50		7.08
White Sulphur Spgs.		T.	T	.19	.98	.19			.98		.03		.04			.13		.38	T.	T.	.25	.02		.01						.01	T.		3.21
Williamson	Big Sandy	.10	.40		.58	1.04			.20	.08		.46	.02	.20							.66	.85									.20		4.79

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

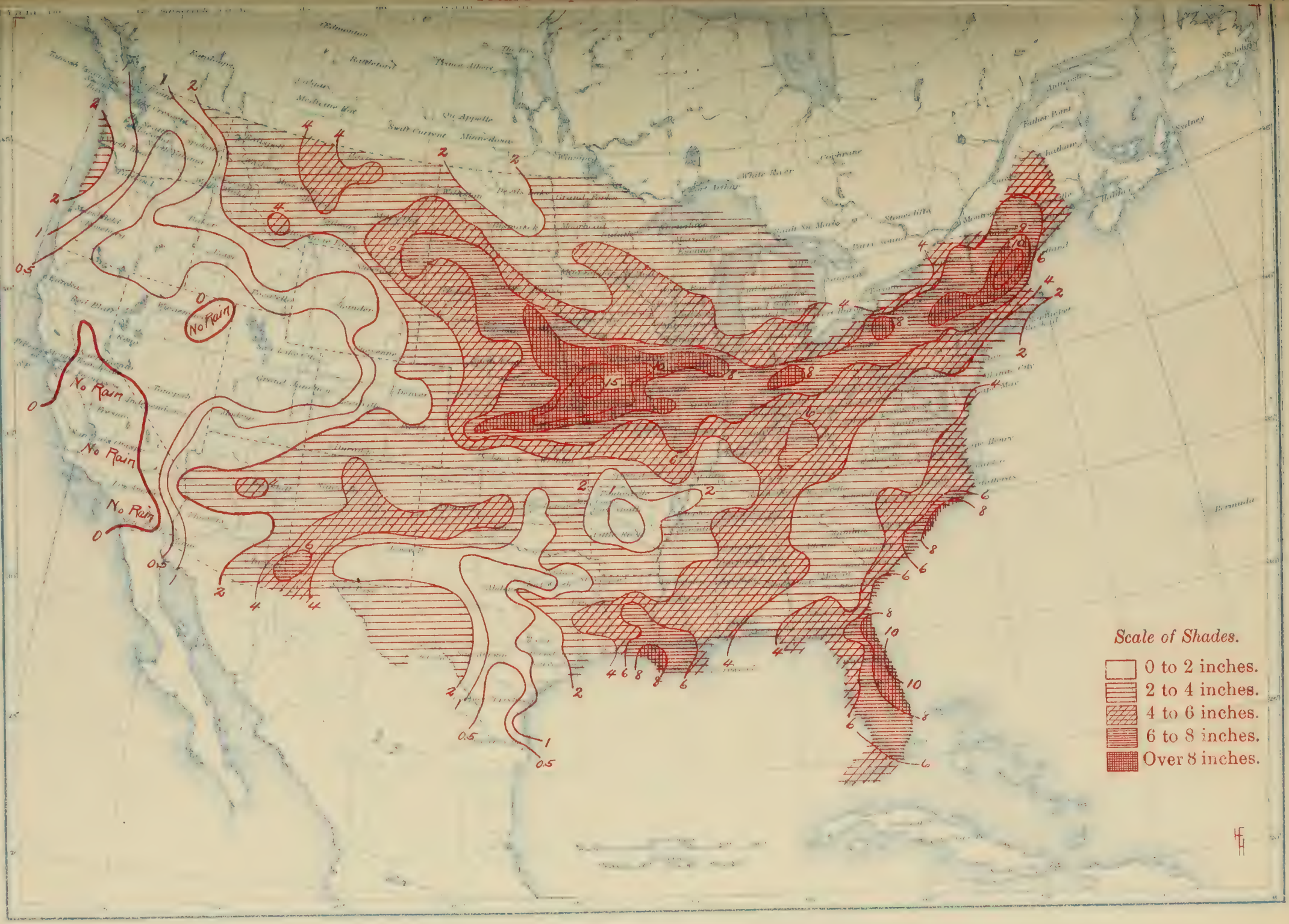
T. Trace, or less than 0.01 inch.

Daily Temperatures for July, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Section.																																	
Bayard	Maximum	81	80	77	76	72	74	84	77	80	77	78	80	84	82	87	85	81	87	86	82	72	73	77	80	84	84	82	80	86	84	90	80.7
	Minimum	62	54	56	59	53	52	42	55	39	45	50	65	58	53	57	62	66	56	54	62	49	42	43	41	48	49	53	55	62	63	68	54.0
Burlington	Maximum	84	78	80	80	75	76	78	79	81	78	79	87	88	87	92	88	90	90	94	78	74	77	81	82	86	87	84	84	89	90	98	83.7
	Minimum	59	60	59	59	61	60	62	49	47	51	55	65	63	59	65	68	62	61	60	64	60	58	52	49	56	58	60	64	68	67	69	59.7
Lost City	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Martinsburg§	Maximum	87	89	88	84	80	84	89	86	88	85	88	90	94	91	81	92	93	96	97	81	78	84	85	88	90	91	88	89	93	95	96	88.4
	Minimum	64	66	60	61	66	58	59	58	56	58	54	61	72	68	67	70	72	67	68	67	63	56	58	57	58	64	66	67	72	69	72	63.7
Moorefield	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Romney	Maximum	87	84	87	83	80	82	88	85	87	87	82	90	94	92	85	97	91	97	99	90	87	85	83	98	93	95	94	90	95	95	96	89.6
	Minimum	63	61	61	60	60	54	50	63	48	52	70	66	65	64	64	66	72	63	60	67	60	55	52	50	68	60	60	64	66	66	68	61.2
Upper Tract	Maximum	86	79	80	80	80	80	85	80	80	82	84	87	90	90	92	95	87	94	94	85	75	77	78	79	87	89	89	83	84	85	94	84.8
	Minimum	59	56	53	53	51	51	48	65	66	44	48	67	61	58	61	65	67	58	60	60	53	49	53	54	49	56	60	60	65	68	63	57.5
Northern Section.																																	
Bens Run	Maximum	79	76	73	84	73	75	80	77	81	78	84	83	91	89	84	89	89	91	89	87	78	81	83	87	87	85	85	83	87	88	94	83.5
	Minimum	62	62	64	60	60	56	56	65	64	58	66	66	61	60	69	68	70	65	68	64	62	56	56	58	61	63	65	65	68	69	69	63.1
Buckhannon	Maximum	82	76	78	80	74	83	77	78	77	78	80	89	86	85	89	89	82	86	89	79	73	76	78	82	85	86	81	83	87	86	90	82.1
	Minimum	58	58	54	62	58	48	60	61	48	51	58	63	62	60	61	61	60	62	62	64	54	45	47	50	55	55	59	58	55	59	69	57.3
Central Station	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Creston	Maximum	87	78	75	83	77	82	86	79	82	78	82	90	93	93	95	95	88	96	97	82	80	85	88	92	96	95	97	87	92	92	95	87.6
	Minimum	63	61	60	62	58	52	52	64	51	56	66	66	67	64	66	67	69	63	65	65	61	54	52	54	59	59	65	61	68	69	..	61.5
Elkins	Maximum	81	72	76	78	70	76	83	73	79	80	80	80	84	84	87	87	80	87	87	77	73	75	79	80	84	84	83	82	85	83	91	81.6
	Minimum	59	56	57	62	54	52	48	55	46	51	57	65	62	61	63	66	66	61	61	56	52	49	49	49	54	55	61	59	64	68	64	57.5
Fairmont§	Maximum	86	76	78	85	76	81	83	80	82	83	82	87	92	90	96	87	89	94	93	80	80	82	84	90	91	90	88	92	91	92	97	86.4
	Minimum	63	60	60	61	58	49	53	57	50	54	62	67	62	61	65	66	67	63	63	62	60	53	53	54	58	59	61	62	67	68	71	60.2
Glenville	Maximum	78	78	78	81	81	82	84	83	85	85	83	88	90	91	93	90	89	93	94	92	79	80	85	88	90	90	89	88	91	90	95	87.5
	Minimum	64	54	52	64	52	52	53	57	51	56	63	66	67	64	65	68	68	64	65	67	60	58	58	55	57	56	55	57	67	67	69	60.2
Grafton	Maximum	85	79	78	80	77	80	83	78	80	78	82	80	89	91	92	86	88	92	92	82	78	80	85	89	90	88	85	82	90	90	96	84.7
	Minimum	65	60	59	61	59	51	50	61	49	52	60	65	63	62	62	67	66	63	62	64	62	52	51	53	58	58	61	61	67	68	69	60.0
Lost Creek	Maximum	83	75	76	81	76	79	83	78	83	80	78	84	90	89	91	92	86	91	76	77	75	80	84	87	90	89	88	83	89	88	93	83.7
	Minimum	59	57	61	61	56	51	48	60	58	46	58	66	70	60	63	67	65	61	64	62	58	50	47	50	55	55	60	58	66	68	64	58.8
Mannington	Maximum	82	75	75	81	78	76	81	77	80	80	81	84	87	85	88	85	86	89	88	82	77	79	79	83	86	85	83	79	87	89	92	82.5
	Minimum	60	58	58	59	56	47	48	61	49	54	60	61	61	59	64	66	65	61	59	60	58	51	49	51	55	56	60	60	67	67	71	58.5
Morgantown	Maximum	82	76	76	81	75	77	81	74	78	81	81	85	87	94	86	87	86	91	90	84	76	78	79	85	88	86	84	80	87	89	92	82.8
	Minimum	64	60	64	58	56	52	54	66	59	59	64	69	63	62	65	67	70	65	64	62	59	51	51	55	61	59	61	61	65	63	60	60.8
New Cumberland	Maximum	82	78	74	82	79	77	76	76	82	82	80	87	87	86	84	90	89	92	86	75	76	76	82	86	87	85	81	76	82	88	88	82.3
	Minimum	61	60	62	59	56	48	53	64	48	54	64	64	61	58	65	67	67	60	64	55	55	48	48	50	62	65	59	62	69	69	69	59.5
New Martinsville	Maximum	83	75	74	83	81	85	81	78	84	82	85	86	90	89	93	89	89	93	90	85	80	82	83	88	88	86	86	83	87	89	95	85.2
	Minimum	64	62	62	60	59	52	54	65	54	56	66	68	65	62	68	68	69	65	65	63	60	56	56	55	58	61	65	63	69	69	73	62.3
Parkersburg	Maximum	82	79	71	82	75	78	82	77	79	79	83	85	88	87	91	91	86	93	90	81	77	78	80	83	88	85	84	81	90	89	94	83.5
	Minimum	61	63	63	60	59	56	57	61	55	59	68	72	68	69	71	71	73	66	69	65	62	58	56	56	61	63	65	64	69	73	70	63.9
Parsons	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Philippi	Maximum	84	76	81	80	78	82	80	83	85	81	80	85	90	88	92	87	86	90	91	77	80	82	82	85	89	87	85	82	89	88	93	84.5
	Minimum	65	58	59	61	58	59	57	49	38	51	54	67	62	59	64	68	66	61	63	65	63	49	57	50	56	56	62	60	67	69	67	59.4
Pickens	Maximum	77	68	71	67	67	69	78	70	73	71	73	78	78	78	80	82	74	81	82	72	65	72	71	72	77	78	75	77	80	77	82	74.7
	Minimum	58	55	57	56	53	46	49	58	46	53	59	65	64	61	61	66	63	59	62	59	52	47	48	49	55	56	58	58	61	65	64	56.9
Terra Alta	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Wellsburg	Maximum	79	74	78	79	72	72	76	74	77	80	76	82	83	82	81	85	83	85	84	76	72	74	75	79	82	80	78	74	81	84	86	78.6
	Minimum	62	61	63	60	56	52	55	64	52	61	64	66	64	61	66	72	70	64	70	58	57	52	54	55	58	64	59	62	68	68	70	61.5
Weston§	Maximum	80	74	78	76	72	76	80	84	78	80	84	82	86	88	90	90	88	..	88	78	76	76	78	84	86	84	82	80	86	86	88	81.9
	Minimum	62	58	62	60	58	52	54	59	52	56	58	62	64	62	64	68	64	62	..	64	54	52	54	54	58	60	64	62	68	68	..	59.7
Wheeling§	Maximum	84	75	76	85	79	80	81	84	83	81	89	90	88	84	90	91	93	92	79	78	82	82	87	91	88	87	80	88	91	92	84.7
	Minimum	64	64	63	62	57	52	55	58	53	57	60	64	65	62	63	68	70	65	66	61	59	54	54	55	56	59	63	63	65	70	72	61.3
Southern Section.																																	
Beckley	Maximum	79	81	78	79	79	80	81	80	82	81	85	86	89	87	84	85	85	84	89	87	71	72	80	81	81	80	81	86	85	86	86	82.4
	Minimum	58	60	55	54	59	47	47	58	58	58	59	55	61	61	60	65	64	65	62	62	52	52	50	52	53	51	55	50	61	61	61	57.9
Bluefield	Maximum	73	75	72	78	76	77	81	77	79	75	81	83	79	85	86	85	81	80	85	80	72	74	79	79	80	84	84	85	88	87	90	81.3
	Minimum	63	60	57	57	55	48	55	55	54	64	66	67	65	64	62	65	68	70	64	64	60	51	52	57	60	58	61	60	63	69	70	60.3
Charleston	Maximum	85	83	82	83	83	85	88	85	86	86	89	91	91	95	92	96	95	97	97	88	89	88	85	89	90	92	91	91	94	96	98	89.5
	Minimum	65	64	63	63	59	54	55	61	59	58	66	70	73	68	70	69	71	68	70	69	63	53	52	54	60	62	67	65	69	71	67	63.8
Elkhorn	Maximum	73	75	75	77	75	78	81	81	78	78	83	81	80	86	88	89	82	88	88	84	73	75	75	79	83	86	86	87	89	89	91	81.7
	Minimum	64	61	56	56	57	55	53	63	54	61	64	67	70	65	63	68	67	68	65	65	64	54	54	54	58	59	61	61	62	64	65	61.2
Green Sulphur Spgs.	Maximum	79	78	69	79	74	78	83	80	81	74	89	87	85	88	90	91	92	92	83	77	82	80	81	86	86	89	89	91	92	93	95	84.2
	Minimum	60	58	57	57	55	46	49	61	52	53	58	63	65	60	57	63	62	63	61	57	54	51	48	51	52	54	61	60	58	64	65	57.3
Hinton§	Maximum	80	79	76	80	76	81	86	82	84	72	90	89	84	88	92	92	87	93	93	73	78	78	83	87	90	90	92	93	94	93	95	85.5
	Minimum	62	60	59	60	58	52	53	56	57	57	61	65	70	65	65	64	66	67	65	66	62	56	55	57	57	60	63	64	64	66	67	61.3
Holcomb§	Maximum	80	78	77	78	72	78	82	75	83	84	85	92	89	88	88	90	82	90	88	74	71	75	77	82	85	85	83	86	87	84	91	82.5
	Minimum	60	55	54	58	58	46	50	56	50	56	64	64	59	62	62	61	61	60	59	57	54	55	48	52	60	60	49	55	53	53	56	56.2
Huntington§	Maximum	78	83	73	85	79	79	81	81	83	83	87	89	89	91	95	94	91	93	93	80	81	81	83	88	86	89	89	87	89	91	93	86.6
	Minimum	66	65	65	64	59	55	57	63	57	62	66	76	69	69	72	72	75	69	71	69	63	57	55	59	61	62	68	67	69	70	68	64.9
Lewisburg	Maximum	78	73	68	79	71	76	82	78	78	74	85	83	82	84	88	89	84	88	89	75	76	77	80	81	83	83	84	85	87	85	90	81.1
	Minimum	61	58	53	57	56	46	50	61	51	52	58	67	68	61	58	61	65	61	62	64	56	49	52	51	54	57	61	61	61	63	62	57.9
Madison	Maximum	90	82	74	80	82	85	82	85	..	84	89	89	85	89	94	94	89	94	93	71	80	81	83	88	89	89	92	91	94	84	..	86.3
	Minimum	..	58	62	64	58	55	56	58	58	..	64	70	71	70	70	69	71	71	69	68	64	60	56	57	60	62	62	66	68	70	68	64.0
Marlinton	Maximum	74	68	67	67	68	70	74	70	73	69	76	79	78	79	81	80	79	83	82	72	66	70	71	74	76	78	79	78	79	88	86	75.3
	Minimum	51	49	50	52	58	42	46	62	46	48	57	55	62	58	52	60	64	57	58	58	56	46	48	49	52	51	59	58	59	58	62	54.7
Point Pleasant	Maximum	84	81	75	84	80	81	84	79	81	85	87	88	90	92	93	95	92	94	94	81	82	83	85	90	91	91	89	86	94	92	97	87.1
	Minimum	61	63	62	66	56	53	54	65	50	56	65	68	67	63	69	69	71	65	67	62	59	50	50	53	56	59	64	61	66	71	67	61.3
Powellton	Maximum	..	..	79	..	80	81	86	85	85	81	..	90	88	91	93	93	93	95	96	91	77	80	81	86	..	89	90	91	92	88	95	87.5
	Minimum	..	..	59	..	59	49	50	64	59	58	..	65	70	63	64	68	70	65	68	65	63	56	51	55	..	63	64	62	65	68	64	61.8
Robertsburg§	Maximum	84	80	70	85	75	80	80	76	85	85	88	89	88	85	94	90	89	96	90	85	78	80	84	86	90	89	85	90	92	87	96	85.5
	Minimum	62	62	60	60	58	51	52	59	52	57	64	65	69	64	65	67	71	63	66	65	68	54	52	52	56	56	65	61	66	69	66	60.9
Ryan	Maximum	85	80	75	85	77	80	80	79	80	80	85	90	90	90	90	91	88	90	90	87	83	70	88	88	88	90	89	89	92	90	98	85.6
	Minimum	65	62	58	60	59	52	47	63	49	55	65	67	67	64	65	67	68	67	64	65	65	55	47	51	56	57	63	59	67	70	65	60.7
Spencer§	Maximum	82	79	73	80	74	76	82	77	81	80	82	85	87	88	89	90	92	89	77	76	77	77	80	85	88	88	86	85	85	93	88	82.9
	Minimum	60	60	59	58	57	49	50	64	49	55	67	66	66	64	66	67	70	60	65	60	54	49	54	52	50	56	55	54	66	68	68	59.3
Union§	Maximum	74	72	78	70	75	81	79	78	80	82	85	84	80	85	86	87	86	88	86	70	75	80	80	85	85	87	87	..	..	..	..	80.9
	Minimum	57	53	56	58	50	52	59	51	52	53	56	57	68	62	59	62	66	63	63	63	58	50	52	51	54	55	59	60	..	..	..	57.1
White Sulphur Spgs.	Maximum	75	74	68	76	72	74	79	79	75	71	79	85	84	86	83	87	85	81	78	76	75	78	81	84	84	85	87	86	88	79.8
	Minimum	61	55	52	58	55	44	47	59	52	48	57	67	69	59	56	61	62	61	61	63	56	49	52	50	52	53	59	59	60	61	65	56.9
Williamson§	Maximum	75	79	71	79	75	79	83	82	85	81	88	86	86	91	92	93	88	92	92	74	79	80	82	87	87	90	90	92	94	93	91	85.9
	Minimum	65	65	64	65	59	55	57	61	60	60	67	70	70	71	72	73	73	72	73	69	66	62	58	58	64	65	66	70	71	72	70	65.9

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, July, 1913.



WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

AUGUST, 1915

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
SEPTEMBER 23, 1915

Departure of the Mean Temperature from the Normal, August, 1915.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIII. PARKERSBURG, W. VA., AUGUST, 1915. No. 8.

GENERAL SUMMARY.

With an average temperature of 69.4°, the past month was the coolest August of record, except in 1909 and 1912, when the August averages were 69.4° and 69.3°, respectively. Cool weather was the rule after the 4th and the last week in the month was the coolest of record for July and August in practically all sections. While light frosts were noted in a few of the more elevated localities on the 19th and frost temperatures occurred on the morning of the 31st in the northwest counties, no frost damage resulted. The month was also characterized by frequent and unfavorably distributed showers, giving an average precipitation much above the normal. Measureable amounts of precipitation occurred on an average of 14 days, while in many localities rain fell on from 16 to more than 20 days. Although unseasonably cool and much too wet in sections, all crops made good progress, and at the close of the month the condition of corn, potatoes, buckwheat, and pastures was excellent. There was a large yield of peaches, but the apple crop was only generally fair to poor.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.00 and 29.99 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.24 inches on the 31st, and 29.69 inches on the 21st. Elkins, 30.28 inches on the 31st, and 29.64 inches on the 21st.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 69.4°. The mean departure from the normal for 37 stations having ten or more years of record was —2.6°. The month opened warm, the highest temperatures occurring generally from the 1st to the 3d, and readings near the normal or slightly above were recorded from the 8th to the 17th and 21st to the 23d. Well marked periods of unseasonably cool weather prevailed from the 5th to the 7th, 17th to the 21st, and 25th to the close of the month, the lowest readings occurring generally on the 19th and 31st, except at several stations in the southern portion of the State, where the lowest temperatures were recorded on the 26th. A temperature of 36° occurred at New Cumberland, Hancock county, on the 31st.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 83 per cent; 8 p. m., 78 per cent. The August averages for the same hours for the past 27 years are 82 and 69 per cent, respectively. Elkins, 8 a. m., 87 per cent; 8 p. m., 80 per cent. The August averages for Elkins for the same hours for the past 14 years are 91 and 82 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 53 stations reporting, was 4.84 inches. The mean departure from the normal for 42 stations having ten or more years of record was + 1.09 inches. Over the southern half of the State and the northern portion of the Great Kanawha and upper portion of the Little Kanawha basins, the rainfall was below the normal in nearly all localities. Except the northern panhandle counties, the amounts were much above the normal over the northern counties, being greatest over the eastern panhandle division. While showers fell in many localities daily from the 1st to the 4th, 7th to the 9th, 11th to the 13th, 15th to the 18th, 20th to the 24th, and 27th to the 30th, the heaviest rainfall was recorded on the 3d, 8th, 12th, 17th, 21st-22d, 28th, and 30th.

WIND.

The average wind velocity at Parkersburg was 4.1 miles per hour, or 0.1 mile below the August average for 25 years. The average at Elkins was 3.3 miles per hour, or 0.6 mile above the August average for 15 years. The highest velocity at Parkersburg was 19 miles per hour from the west on the 8th, and at Elkins 16 miles per hour from the west on the 4th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 38 per cent of the possible amount, or 19 per cent below the August average for 17 years. The average at Elkins was 44 per cent, or 7 per cent below the August average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 2d, 10th, 13th, 14th, 15th, 16th, 17th, 19th, and 23d; Charleston, 10th, 23d, 24th, and 26th; Elkins, 2d, 5th, 10th, 14th, 19th, 20th, and 24th; Grafton, 5th, 9th, 10th, 13th, 14th, 16th, 18th, 19th, 20th, 23d, 24th, 25th, 26th, 27th, 28th, 29th, and 31st; Green Sulphur Springs, 25th, 26th, 27th, 28th, 29th, 30th, and 31st; Hinton, 1st, 7th, 14th, and 16th; Mannington, 2d, 3d, 10th, 13th, 14th, 16th, 19th, 20th, 23d, 24th, 26th, 29th, and 30th; Nuttallburg, 18th; Parkersburg, 28th and 29th; Rowlesburg, 6th, 8th, 24th, and 26th; Wheeling, 16th, 19th, 20th, and 24th; Williamson, 15th and 16th.

Frost, light: Davis and Pickens on the 19th.

Hail: Morgantown, 17th; Romney, 8th.

Halo, lunar: Parkersburg, 19th.

Halo, solar: Wellsburg, 20th.

Haze: Bayard, 23d, 25th, 26th, and 29th; Pickens, 19th.

Thunderstorms (dates and number of stations reporting): 1st, 9; 2d, 11; 3d, 7; 4th, 1; 6th, 1; 7th, 3; 8th, 12; 9th, 3; 10th, 1; 11th, 4; 12th, 5; 14th, 3; 15th, 3; 17th, 9; 20th, 1; 21st, 1; 22d, 1; 24th, 2; 25th, 1; 28th, 1; 29th, 1; 30th, 2.

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature.			Precipitation.			Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Clear.	Partly cloudy.	Cloudy.
1891	69.8	..	...	5.48	.. ..	....	..	..	..
1892	72.1	96	41	2.55	....	....	..	..	..
1893	70.8	98	41	3.38	....	....	..	..	..
1894	71.5	105	38	2.07	5.15	0.27	14	12	5
1895	73.3	104	40	3.01	7.69	1.15	15	11	5
1896	72.6	97	40	2.82	5.69	0.88	15	12	4
1897	70.9	100	42	2.91	5.93	0.77	13	14	4
1898	73.7	96	44	7.51	11.57	4.40	12	12	7
1899	73.5	100	34	2.64	6.37	0.34	15	11	5
1900	76.0	100	45	3.15	7.20	1.03	17	10	4
1901	73.6	98	43	5.14	13.70	1.64	10	13	8
1902	70.4	98	35	2.40	6.05	0.97	15	13	3
1903	71.4	105	38	2.64	5.85	0.99	12	13	6
1904	70.7	95	32	2.88	6.71	0.67	15	10	6
1905	71.3	96	40	4.25	8.32	1.32	14	11	6
1906	75.4	98	47	5.15	10.72	2.18	10	13	8
1907	69.4	93	41	4.64	10.12	1.55	13	10	8
1908	70.9	101	37	2.82	5.63	0.84	15	10	6
1909	70.8	99	37	3.03	5.79	0.81	16	10	5
1910	70.8	98	39	2.03	5.58	0.70	17	10	4
1911	73.5	105	40	6.71	12.14	2.38	13	10	8
1912	69.3	95	35	3.64	11.70	0.25	10	13	8
1913	72.7	102	37	3.18	8.20	0.79	19	7	5
1914	71.8	100	40	4.86	9.29	1.38	15	9	7
1915	69.4	99	36	4.84	8.36	2.46	10	11	10
Means and Extremes	71.8	105	32	3.75	13.70	0.25	14	11	6

Climatological Data for August, 1915.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard [t]	Grant	2,500	12	65.4	−0.4	88	1 †	37	18	39	6.87	+2.41	1.72	0	16	14	7	8	w.	Solomon Clark
Burlington [j]	Mineral	875	20	70.4	−0.7	89	1 †	44	19	31	7.97	+4.40	.....	0	.....	.....	.....	.....	w.	J. W. Vandiver
Franklin	Pendleton	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	William McCoy
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	8.32	+4.76	2.00	0	13	.....	.....	.....	w.	S. W. Lightner
Lost City	Hardy	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. D. Hinegardner
Martinsburg	Berkeley	435	23	72.3	−0.8	93	1 †	50	18	30	8.36	+4.67	1.97	0	14	9	17	5	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. S. Henkel
Piedmont	Mineral	919	0	70.4 [k]	.....	90	2	49	.....	.....	4.85	.....	1.03	0	.....	.....	.....	.....	.....	C. A. Suter, Jr
Romney	Hampshire	824	17	73.0	.....	99	1	44	19	42	5.58	+1.74	1.75	0	10	6	22	3	.....	Geo. E. Arnold
Upper Tract [b]	Pendleton	1,230	15	68.4	−2.7	93	1	43	19	33	.....	.....	.....	0	....	8	12	9	w.	J. M. Mallow
Averages and	Extremes	.....	....	70.0	−1.2	99	1	37	18	42	6.99	+4.00	2.00	0	13	9	15	7	w.	
Northern Division.																				
Bens Run	Pleasants	622	13	69.7	−4.2	90	1 †	46	31	28	4.67	+0.67	1.15	0	14	19	4	8	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	3.93	.....	0.71	0	12	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	67.8	−2.4	90	2 †	43	19	31	5.97	+2.08	1.40	0	14	16	6	9	.....	H. A. Darnall
Cairo	Ritchie	674	12	69.8	−3.3	92	5	48	19 †	29	5.81	+2.29	1.05	0	21	7	18	6	w.	Van A. Zevely
Central Station	Doddridge	950	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. W. Sherwood
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	6.75	.....	1.60	0	13	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	71.5	−1.7	94	1 †	47	19	35	4.70	+1.57	0.62	0	15	7	10	14	sw.	J. M. Reed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	7.75	.....	1.30	0	18	11	5	15	sw.	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	5.50	.....	1.34	0	12	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	66.8	−1.6	89	2	45	19	30	6.21	+2.56	2.07	0	20	4	14	13	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	70.3	−2.6	95	1 †	47	31	33	3.93	+0.56	0.78	0	18	21	4	6	w.	F. P. Hall
Glenville	Gilmer	738	25	72.1	−1.3	96	1	49	19	33	3.74	−0.20	1.40	0	8	16	3	12	s.	M. T. Brannon
Grafton	Taylor	1,000	22	70.8	−0.8	94	1	46	19	35	5.37	+1.37	1.10	0	16	13	9	9	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	69.4	−1.3	91	1 †	44	19	32	6.48	+2.37	1.12	0	15	16	7	8	w.	Allen Smith
Mannington	Marion	974	12	68.2	−3.0	91	3	43	19 †	32	4.18	+0.67	1.06	0	19	11	7	13	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	69.2	−3.1	92	3	46	19 †	30	4.37	+0.28	1.00	0	9	7	14	10	w.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Z. White
New Cumberland	Hancock	987	15	67.9	−1.1	90	1 †	36	31	35	3.87	+0.67	1.94	0	12	5	17	9	w.	M. F. Smith
New Martinsville	Wetzel	634	21	70.2	−3.9	93	3	46	31	30	6.51	+3.52	1.25	0	15	14	8	9	s.	Wm. Ankrom
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Parkersburg	Wood	638	26	69.8	3.5	91	1	48	31	27	4.78	−1.25	1.57	0	16	7	10	14	se.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	67.0	−2.2	89	1	45	19	37	3.95	+0.25	.....	0	16	6	15	10	.....	J. W. Swisher
Philippi	Barbour	1,149	22	70.0	−1.7	94	2	49	19	29	5.60	+1.63	1.10	0	17	13	10	8	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	64.2	−2.8	80	1	44	19	24	6.10	+1.14	1.15	0	17	16	6	9	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	6.34	+2.50	1.20	0	17	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	6.18	.....	1.05	0	14	.....	.....	.....	.....	J. O. Goodman
Smithfield	Wetzel	835	10	69.8	.....	95	15	45	31	31	6.73	+2.75	1.09	0	17	6	14	11	nw.	G. M. Whisler
Terra Alta	Preston	2,612	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. C. Shaffer
Wellsburg [a]	Brooke	1,225	20	66.6	−3.5	87	3	41	31	25	2.85	−0.73	0.56	0	14	6	15	9	w.	C. P. Waugh
Weston	Lewis	1,026	26	68.4	−4.9	90	1	48	19	32	5.73	+1.92	1.10	0	17	6	15	10	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	71.0	.....	95	16	44	31	37	3.50	−0.08	1.65	0	13	8	12	11	sw.	Miss M. B. Forsyth
Averages and	Extremes	.....	....	69.1	−2.6	96	1	36	31	37	5.24	+1.33	2.07	0	15	11	10	10	w.	
Southern Division.																				
Bancroft	Putnam	574	11	70.6	−3.6	96	1	51	19	29	2.46	−2.40	0.71	0	13	14	3	14	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John A. Ewart
Bluefield ††	Mercer	2,558	20	69.2 [a]	−2.2	88 [a]	1	50 [a]	23 †	31	2.54	−2.20	1.35	0	8	14	3	14	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	73.8	−1.7	95	2	52	19	30	2.71	−1.63	0.65	0	11	9	4	18	w.	C. V. Lewis
Clay	Clay	706	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba ††	Jackson	650	14	69.2	−2.8	93	1	47	19	30	3.03	+0.07	0.53	0	17	3	25	3	w.	C. T. Perry
Dam 22 O. R.	Jackson	538	...	.....	.....	.....	.....	.....	.....	.....	3.66	.....	1.32	0	17	.....	.....	.....	.....	U. S. Engineer Office
Dunlow	Wayne	703	7	.....	.....	.....	.....	.....	.....	.....	4.66	.....	1.47	0	9	11	16	4	w.	George Damron
Elkhorn	McDowell	1,933	22	67.8	−3.3	89	1 †	49	26	29	2.66	−1.67	1.20	0	10	6	19	6	w.	J. J. Lincoln
Evans	Jackson	606	0	.....	.....	.....	.....	.....	.....	.....	3.67	.....	0.65	0	15	11	3	17	.....	B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	69.1	−2.5	94	2	45	31	37	5.01	+1.93	1.35	0	8	14	8	9	se.	W. H. Gwinn
Hinton	do	1,450	25	72.4	−1.7	95	1 †	53	26	34	2.68	−1.01	0.68	0	11	8	5	18	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	67.8	.....	90	1 †	47	20	36	5.17	.....	0.90	0	16	9	7	15	.....	R. E. Ferguson
Huntington	Cabell	538	19	71.2	−3.6	92	1	52	19	26	4.09	+0.93	1.15	0	16	10	4	17	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	68.0	−2.0	90	2	46	26	33	3.65	+0.27	0.76	0	13	4	15	12	nw.	Geo. T. Argabrite
Logan	Logan	687	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Oliver, Jr
Madison	Boone	704	9	74.0 [b]	.....	93 [b]	2	54 [b]	19	27 [b]	.....	.....	.....	0	....	4 [g]	15 [g]	5 [g]	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	64.0	−4.0	81	2	44	26	26	4.20	−0.25	0.90	0	14	2	24	5	nw.	S. L. Brown
Nuttallburg	Fayette	2,252	22	65.7	−4.0	86	1	49	19 †	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	70.4	−4.5	94	1	46	19 †	33	3.27	+0.04	0.62	0	16	7	5	19	sw.	W. D. Holmes
Powellton	Fayette	933	17	.....	.....	.....	.....	.....	.....	.....	3.78	+0.05	.....	0	.....	.....	.....	.....	.....	F. L. Evans
Robertsburg	Putnam	574	14	69.6	−5.0	94	1	50	19	36	4.46	+1.05	1.02	0	13	12	6	13	s.	E. C. Brace
Ryan	Roane	700	11	69.2	−2.8	93	1	46	26	33	3.00	−1.13	0.87	0	15	10	10	11	.....	Wm. E. Ryan
Spencer ††	do	784	16	69.2	.....	91	3	45	19	31	4.46	+1.08	0.90	0	13	7	19	5	.....	A. M. McKown
Sutton	Braxton	839	11	71.8 [d]	.....	91 [d]	3 †	51 [d]	19	27 [b]	3.32	−0.55	0.81	0	8	9	16	6	.....	Ben Gillespie
Union	Monroe	2,250	10	67.5 [e]	−3.2	87 [e]	16	46 [e]	26	37 [f]	3.55	+0.02	1.50	0	7	.....	.....	.....	.....	J. C. Shanklin
White Sulphur Springs	Greenbrier	1,940	5	67.6	.....	89	1	47	7 †	35	2.86	.....	0.62	0	11	10	13	8	sw.	J. M. Ayres
Williamson	Mingo	660	13	73.0	−2.1	92	2	56	31	26	3.66	+0.20	0.90	0	16	9	11	11	w.	J. F. Keyser
Averages and	Extremes	.....	.....	69.6	−3.1	96	1	44	26	37	3.65	−0.24	1.50	0	13	9	10	12	w.	
State Averages and	Extremes	.....	.....	69.4	−2.6	95	1	36	31	42	4.84	+1.09	2.07	0	14	10	11	10	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for August, 1915.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
...yard	Potomac	T.	10	1.72	.16	T	....	T.	T.	.25	....	.06	.56	.04	....	.26	....	1.20	....	T	.47	....	.30	....	.14	....	....	.16	1.09	.06	.30	....	6.87
...rlington	do	.42	*	3.12	T.	....	....	.13	....	....	....	.40	.10	....	....	....	....	.55	....	....	*	*	*	*	*	*	*	*	*	*	3.25	....	7.97
...anklin	do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
...rpers Ferry	do	.30	.25	.19	.95	....	1.10	....	....	.25	....	....	.90	1.10	....	....	T.	T.	....	....	....	.28	....	.10	....	....	....	.90	.98	1.02	....	8.32
...st City	do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
...rtinsburg	do	.48	*	1.30	.80	1.32	....	.30	.10	....	....	....	1.18	....	....	.12	....	.06	....	....	....	.40	....	....	.05	....	....	....	1.97	....	.22	....	8.36
...dmont	do	.32	.16	.30	.61	....	....	....	.22	....	.03	....	.18	*	*	*	*	*	*	-	*	*	1.41	....	.16	....	....	.02	1.03	.04	.37	....	4.85
...nney	do	.10	1.05	1.10	....	....	....	....	.30	.18	....	.15	.13	....	....	....	....	.40	....	....	....	.42	....	....	....	....	....	T.	1.75	....	....	....	5.58
...per Tract	do	1.20	1.20	.08	T.	T.	....	....	.38	.10	....	.22	.65	....	....	....	....	.83	....	....	....	.28	....	....	....	....	....	.25	.95	T	.08	....	6.22
Northern Division.																																	
...ns Run	Ohio	....	....	....	.24	....	.04	....	.94	....	....	.20	.16	....	....	.06	....	1.15	....	....	.08	.45	.36	....	.30	....	....	.07	.57	....	.05	....	4.67
...andonville	Monongahela	....	....	.49	.21	....	....	....	....	.56	....	.12	....	T.	....	....	....	*	.60	....	....	.11	.26	.27	.12	....	....	....	.71	....	.49	....	3.94
...ckhannon	do	T.	.84	1.40	....	T.	....	....	.55	.22	....	.10	.13	....	....	....	....	.55	....	....	....	.20	.50	....	.18	.05	....	T	1.06	.04	.15	....	5.97
...ro	Little Kanawha	.05	....	.23	.30	....	....	.05	.21	.18	.06	.05	.17	.14	....	.14	....	.40	.24	....	....	.14	.53	.05	.05	.75	....	.15	.87	....	1.05	....	5.81
...ntral Station	Middle Is. Creek	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
...rtland	Monongahela	....	1.60	.20	....	....	....	....	....	.25	....	.22	.32	....	....	.13	....	.94	....	....	....	.62	.23	.10	....	....	....	....	.88	.23	1.00	....	6.75
...eston	Little Kanawha	.03	....	.40	.25	....	....	.11	.19	.12	....	.02	T.	.10	....	.55	....	....	.30	....	....	.40	.44	T.	T.	.60	....	T.	.62	T.	.57	....	4.70
...vis	Monongahela	....	.35	1.30	.25	....	....	.0	.27	.31	....	....	.20	.53	....	.24	....	1.04	.19	....	....	.34	.27	.25	....	.17	....	T.	.57	.36	1.05	....	7.75
...zabeth	Little Kanawha	....	....	....	1.34	....	....	....	.1	.13	....	....	.20	....	....	1.34	....	.11	.02	....	....	.14	.60	....	....	.34	....	....	.64	....	.19	....	5.50
...kins***	Monongahela	.28	.57	.01	.02	....	T.	.02	.36	.29	....	.04	.79	....	.40	.01	....	2.07	....	....	.15	.14	.13	....	.20	.02	....	.06	.42	.21	T.	....	6.21
...irmont	do	.01	.04	.57	.12	....	....	T.	.04	.74	....	....	.06	.18	....	.95	....	.57	.05	....	....	.05	.40	.03	....	.07	....	....	.60	.18	.17	....	3.93
...nville	Little Kanawha	....	....	1.40	....	....	....	.28	.20	T.	....	....	....	....	....	.45	....	.25	....	....	....	T.	.28	....	....	.60	....	....	.30	....	....	....	3.74
...afton	Monongahela	.12	.25	.64	.23	....	....	.06	.24	.04	....	....	.58	....	....	.12	....	1.10	....	....	....	.16	.27	.13	.87	....	....	....	.16	....	.40	....	5.37
...st Creek	do	.24	....	.92	.15	....	....	.51	.48	....	T.	.30	....	....	....	.06	....	1.12	....	....	.04	.14	.35	....	.65	.03	....	T.	.38	....	1.11	....	6.48
...mmington	do	.28	....	.08	.18	....	....	.01	1.06	.06	....	.14	.09	....	....	.01	....	.48	....	....	.01	.10	.61	.07	.03	.01	....	T.	.80	.02	.14	....	4.18
...rgantown	do	.20	....	.23	.17	....	....	....	.54	T.	....	....	.26	T.	....	....	....	.75	....	....	T.	.90	.28	....	....	....	....	1.00	....	....	....	4.37
...undsville	Ohio	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
...w Cumberland	do	.71	1.23	.04	.67	....	T.	....	.10	....	....	.08	.08	....	....	T	....	.04	....	....	T.	.37	.20	....	.02	....	....	....	.33	T.	T.	....	3.87
...w Martinsville	do	.10	....	.80	1.05	....	.08	.05	1.25	....	....	....	....	....	....	....	....	1.00	....	....	.10	.28	.50	....	.63	.10	.02	....	.45	....	.10	....	6.51
...rkersburg ***	Ohio	....	.02	.47	....	.04	T.	....	1.57	....	....	.24	.12	....	.09	....	....	.41	....	....	.10	.56	.06	....	.45	.02	....	.15	.39	.09	T.	....	4.78
...rsons	Monongahela	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
...ilippi	do	....	T.	1.10	.11	....	T.	.02	.20	.78	....	.03	.29	....	....	.16	....	.81	....	....	.04	.17	.27	.13	.45	....	....	T.	.74	.04	.26	....	5.60
...kens	do	....	.30	.05	....	T.	....	.15	.07	....	....	1.01	.27	....	....	.69	....	.76	....	....	.19	.12	.80	....	.23	.16	....	.51	.64	.07	.10	....	6.10
...wlesburg	do	....	.06	1.20	.26	....	....	.14	.84	....	....	.06	.60	....	....	.10	....	.34	.12	....	....	.40	.30	.16	....	.34	....	....	.76	.26	.40	....	6.34
...int Marys	Ohio	....	....	....	1.05	....	....	....	.40	.80	.20	.20	.55	.25	....	....	....	.40	.50	....	....	.30	.60	.20	....	.95	....	....	....	.50	.08	....	6.18
...ithfield	Fishing Creek	.34	....	.27	.42	....	....	.17	....	.97	.12	....	.41	.31	....	.13	....	.57	....	....	....	.19	.96	.18	.08	.32	....	....	.42	.87	....	....	....	6.73
...rra Alta	Monongahela	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
...llsburg	Ohio	.40	.10	.40	....	....	.05	.10	.21	....	....	.08	.15	....	....	....	....	.15	....	....	T.	.31	.30	.02	.02	....	....	T.	.56	....	....	....	2.85
...ston	Monongahela	....	....	.90	.05	....	....	....	.40	.80	....	.06	.12	....	.40	....	....	.50	.60	....	....	.10	.10	.20	.02	.50	....	....	.10	.20	.68	....	5.73
...heeling	Ohio	.25	....	T.	1.65	....	....	.04	.01	T.	....	....	.15	T.	T.	....	....	.15	T.	....	....	.24	.55	.02	....	.15	....	....	.27	.01	.03	....	3.50
Southern Division.																																	
...ncroft	Great Kanawha	....	....	.71	.09	....	....	....	.23	.19	....	....	.06	.17	....	....	....	....	....	....	.18	.07	.16	....	.04	.15	T.	....	.21	....	.20	....	2.46
...ckley	do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
...efield	do	....	....	....	....	....	....	....	....	....	....	....	.05	....	....	.10	....	.35	.15	....	.06	....	....	....	....	....	....	1.35	.30	....	....	.08	2.44
...arleston	do	....	.35	.50	.65	....	....	....	.04	....	T.	.10	....	....	....	.40	....	....	.04	....	....	.08	....	....	....	....	.10	T.	.25	T.	.20	....	2.71
...ay	do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
...ba	Sand Creek	.27	.11	.53	....	....	.02	.11	.26	T.	....	....	.06	....	....	.33	....	.05	....	....	.10	.20	.08	....	....	.20	....	.12	.40	.04	.16	....	3.03
...m 22 O. R	Jackson	....	....	.13	1.32	....	.06	.06	.16	.05	....	....	.10	.08	....	.32	....	....	....	....	....	.10	.20	.10	.21	.07	....	....	.43	.03	.20	....	3.16
...mlow	Big Sandy	....	1.47	.41	....	....	....	....	.73	....	.22	.31	....	1.05	....	....	....	.19	....	....	....	.14	....	....	....	....	....	.14	....	....	....	....	4.66
...khorn	do	....	....	.25	....	....	....	....	.45	....	.24	.12	....	....	....	....	....	.04	.15	....	.15	.05	....	....	....	.01	....	1.20	....	....	....	....	2.66
...ans	Ohio	....	.10	.65	.15	....	.03	....	.31	T.	....	.46	.19	....	....	.23	....	.03	....	....	.05	.28	....	....	T.	.38	....	.15	.62	.03	....	....	3.67
...en Sulphur Spgs.	Great Kanawha	....	....	.55	....	....	....	....	.10	....	....	.70	1.13	....	....	....	....	1.35	....	....	.20	....	....	....	....	....	.51	.47	....	....	....	....	5.01
...nton	do	....	....	.18	.40	....	....	....	.02	....	T.	.66	....	....	....	....	....	.04	.28	....	....	.22	....	....	.02	....	....	T.	.68	.14	.04	T.	2.68
...bloomb	do	T.	.65	.10	....	....	....	.20	.35	.30	....	*	.77	....	.60	....	....	.90	....	....	.08	*	.67	....	....	....	....	*	.33	*	.25	....	5.17
...ntington	Ohio	....	....	.42	.64	....	T.	....	.16	.15	....	.04	.25	.05	....	1.15	....	.02	.02	....	....	.28	.17	....	.06	.18	....	T.	.60	....	.40	....	4.59
...wisburg	Great Kanawha	....	.21	.04	....	....	....	....	.06	.15	....	.33	.76	....	....	.36	....	.52	....	....	.09	.15	....	....	T.	....	....	.52	.24	....	.24	....	3.15
...gan	Guyandotte	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
...dison	Great Kanawha	.15	.21	.40	.65	....	....	T.	....	T.	.44	T.	.70	.03	....	.21	T.	....	.35	....	.01	.15	.08	....	....	....	....	....	1.40	.03	....	....	†††
...rlinton	do	.31	.24	.18	....	....	....	....	.32	....	....	.90	T.	....	....	.04	....	.38	.02	....	.40	.18	.02	....	.04	....	....	.34	.85	....	....	....	4.20
...ttallburg	do	....	....	T.	....	....	....	....	....	T.	.90	....	....	....	....	....	.70	....	.70	....	.30	T.	....	....	....	....	....	....	.30	.35	....	....	3.25
...int Pleasant	Ohio	....	....	.34	.28	....	.04	....	.20	.20	....	.08	.02	....	....	.55	....	.04	....	....	....	.18	.10	....	.01	.16	....	....	.60	.02	.51	....	3.27
...wellton	Great Kanawha	....	....	.71	*	*	*	*	.35	.60	*	*	*	*	*	*	*	*	*	1.80	*	*	*	*	*	*	*	.22	....	.10	....	....	3.78
...obertsburg	do	1.02	....	.25	.82	....	....	....	.20	.22	....	*	.12	.25	....	.22	....	....	....	....	....	.20	.10	....	....	.34	....	....	.56	....	.16	....	4.46
...an	do	....	.27	.87	.01	....	.12	....	.30	....	....	.06	.01	....	....	.38	....	....	.06	....	....	.06	.03	....	T.	....	....	.43	.11	.25	.04	....	3.00
......	do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
...ncer	Little Kanawha	.34	....	.15	.40	....	....	....	.52	.55	....	....	.10	.35	....	.90	....	....	.30	....	....	....	.25	....	.15	....	....	.30	....	.15	....	....	4.46
...tton	Great Kanawha	T	T.	.50	.10	....	.15	....	.60	....	....	....	....	....	....	....	....	....	T.	....	....	.50	....	.26	....	.40	....	....	.81	T.	T.	....	3.32
...ton	do	....	....	.35	....	....	....	....	....	....	....	1.50	.50	....	....	....	....	T.	....	....	.10	....	....	....	T.	....	....	.70	....	.30	....	.10	3.55
...hite Sulphur Spgs	....	....	.08	.06	....	....	....	T.	T.	....	.37	.47	....	....	.29	....	.62	....	....	.14	.07	....	....	.04	....	....	.50	.22	....	T	....	2.86
...illiamson	Big Sandy	.02	.28	.18	.62	....	T.	.02	....	.14	....	.10	.30	.36	....	.10	....	....	.44	....	T.	.08	.02	....	....	....	....	.08	.90	....	.02	....	3.66

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

|||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

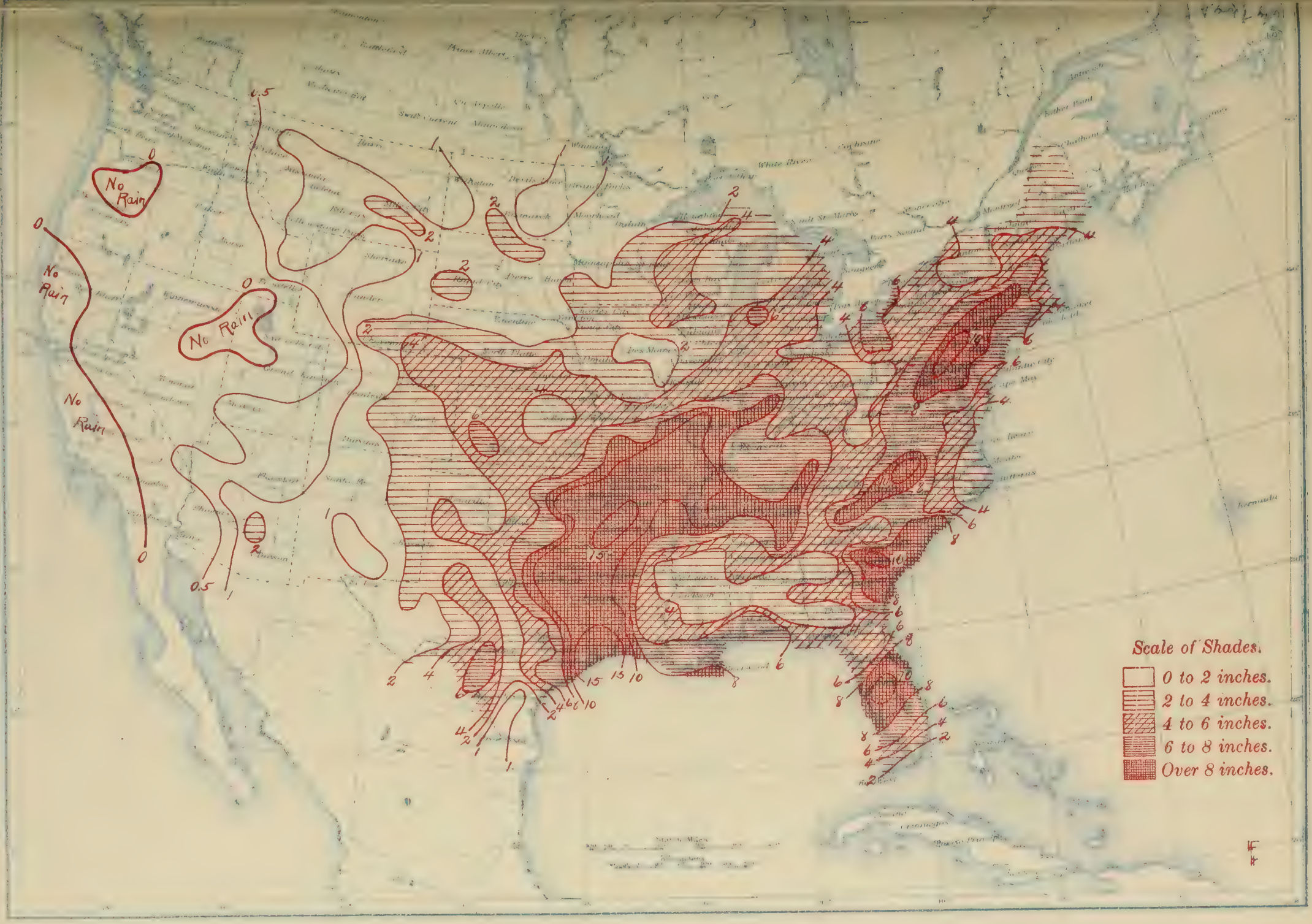
T Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for August, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Division.																																	
Bayard	Maximum	88	88	86	79	79	71	79	80	79	..	76	81	78	84	83	84	80	76	75	79	..	69	80	77	69	73	69	57	75	67	70	76.9
	Minimum	62	60	64	64	50	48	48	52	54	..	56	62	55	50	55	53	57	37	41	60	..	58	59	50	60	53	50	50	53	55	49	54.0
Burlington	Maximum	89	86	89	80	76	82	81	86	85	85	73	78	83	84	86	86	76	74	75	..	..	..	..	..	..	..	..	..	..	..	..	81.8
	Minimum	62	66	66	59	58	55	59	61	63	59	60	65	61	57	62	59	60	47	44	..	..	..	..	..	..	..	..	..	..	..	..	59.1
Martinsburg§	Maximum	93	93	89	90	88	80	86	85	88	86	85	82	80	89	91	90	79	76	81	81	84	81	86	87	78	80	68	59	77	76	73	82.6
	Minimum	70	69	70	64	67	64	60	63	64	64	64	63	67	64	65	67	69	50	51	53	57	67	65	61	65	60	60	55	54	58	52	62.0
Moorefield	Maximum	85	90	88	84	83	77	81	80	84	77	..	..	..	..	..	..	..	..	..	..	..	71	83	77	71	76	68	59	73	74	75	77.8
	Minimum	72	72	70	70	62	61	58	63	62	..	68	67	..	..	..	..	..	..	..	..	..	..	65	62	67	55	59	55	56	62	54	63.0
Romney	Maximum	99	98	94	90	87	83	90	95	96	86	77	84	90	90	91	92	84	87	82	81	90	90	89	90	91	89	88	82	84	80	76	87.9
	Minimum	66	66	65	65	60	60	65	58	60	62	60	65	61	60	61	62	49	45	44	46	64	65	60	55	54	53	53	50	60	55	55	58.2
Upper Tract	Maximum	93	90	88	84	84	75	80	80	84	82	83	79	79	79	87	82	83	71	75	74	79	77	77	79	75	79	73	60	76	..	..	79.6
	Minimum	65	65	65	65	60	54	53	53	55	55	57	64	58	57	56	63	58	65	43	48	61	65	63	53	62	46	57	52	50	..	..	57.2
Northern Division.																																	
Bens Run	Maximum	90	87	90	83	76	74	84	81	85	83	83	84	80	87	83	87	87	71	78	75	78	70	81	71	70	75	64	63	76	70	74	78.7
	Minimum	69	71	67	70	61	55	61	63	59	61	67	69	62	61	67	63	65	53	50	56	62	63	58	59	59	57	53	57	58	56	46	60.7
Buckhannon	Maximum	87	90	90	84	81	74	81	83	82	80	79	83	81	83	83	84	80	71	74	74	84	66	79	75	73	72	70	68	75	75	68	78.4
	Minimum	65	66	64	67	58	57	54	57	60	58	57	65	59	56	60	59	64	51	43	49	62	60	57	52	53	47	55	55	54	57	50	57.1
Central Station	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Creston	Maximum	94	89	92	86	81	80	89	87	89	89	83	83	89	93	88	94	86	73	82	75	81	70	86	76	77	80	71	67	80	76	77	82.7
	Minimum	69	68	67	70	61	61	58	61	62	61	65	67	59	59	65	63	70	53	47	53	63	62	55	56	58	50	59	58	57	60	52	60.3
Elkins	Maximum	87	89	88	81	77	69	79	82	79	77	74	81	76	82	80	82	74	70	75	72	82	64	79	72	68	74	65	66	76	66	72	76.1
	Minimum	66	66	65	61	58	56	55	59	61	57	60	65	61	58	59	62	61	50	45	49	63	62	58	54	52	50	54	57	59	54	46	57.5
Fairmont§	Maximum	95	91	95	86	83	79	85	83	87	89	82	89	83	90	88	92	78	76	81	78	86	67	85	74	76	80	69	68	79	73	73	81.9
	Minimum	67	69	68	70	59	60	57	61	60	60	62	67	59	57	61	60	61	50	48	49	55	61	57	55	58	55	56	56	57	58	47	58.7
Glenville	Maximum	96	94	92	91	87	87	85	87	86	86	85	88	85	88	87	91	85	85	80	78	84	78	85	82	76	77	77	71	80	78	76	84.1
	Minimum	68	70	70	71	54	55	57	58	63	62	65	67	62	62	66	65	68	54	49	50	64	63	56	57	56	52	58	58	58	53	52	60.1
Grafton	Maximum	94	92	92	89	85	75	84	84	85	84	82	87	83	89	86	89	84	73	81	78	84	70	84	78	72	78	72	69	78	74	70	81.5
	Minimum	67	69	68	71	60	61	57	69	61	60	62	67	61	58	63	60	65	49	46	51	64	62	61	56	62	56	60	53	60	60	50	60.0
Lost Creek	Maximum	91	90	91	83	80	76	84	85	85	83	83	87	83	87	86	87	78	73	76	79	83	67	84	76	74	76	71	66	78	73	71	89.2
	Minimum	69	67	65	70	59	59	56	59	61	58	64	68	58	55	62	60	64	50	44	48	63	62	55	53	60	49	59	57	57	58	50	58.7
Mannington	Maximum	88	86	91	82	78	75	82	80	83	82	79	84	80	84	83	86	83	72	75	75	83	66	81	74	71	74	68	67	74	71	71	78.3
	Minimum	65	66	67	70	56	56	56	57	57	59	62	66	56	56	62	58	64	47	43	49	63	63	57	54	60	55	57	57	58	58	43	58.0
Morgantown	Maximum	91	87	92	83	81	76	81	80	83	82	75	86	80	86	85	87	83	72	76	76	83	64	80	77	70	75	70	63	74	70	67	78.5
	Minimum	68	69	69	69	59	60	61	62	64	59	63	67	64	59	65	62	64	48	46	53	63	61	62	56	58	55	55	51	58	58	46	59.8
New Cumberland	Maximum	90	81	90	82	77	72	80	82	82	83	75	83	80	85	82	86	75	74	77	79	79	69	82	76	72	73	64	62	77	69	68	77.6
	Minimum	68	69	69	70	60	61	66	62	58	58	64	65	60	57	64	61	64	44	44	49	64	59	57	56	54	53	50	52	57	52	36	58.2
New Martinsville	Maximum	92	88	93	84	83	76	83	82	83	85	82	86	79	80	85	90	84	78	81	76	79	68	76	76	72	79	69	65	72	71	75	79.7
	Minimum	69	69	70	70	61	61	60	60	59	62	66	68	61	60	66	62	66	51	51	54	63	62	60	58	57	58	58	58	61	59	46	60.8
Parkersburg	Maximum	91	85	88	83	73	76	84	83	84	82	82	84	82	85	82	88	76	70	75	73	76	73	83	76	73	74	66	68	77	66	69	78.3
	Minimum	71	71	70	67	62	61	62	64	64	64	68	67	64	60	68	61	61	54	53	56	62	64	57	59	59	55	58	59	59	53	48	61.3
Parsons	Maximum	89	88	87	85	84	85	84	85	86	87	80	80	80	79	81	82	80	72	75	78	85	78	79	71	69	71	68	65	74	65	69	78.8
	Minimum	60	58	57	58	56	54	55	56	56	57	59	62	53	53	56	57	50	48	45	49	48	60	61	56	57	54	54	55	57	59	52	55.2
Philippi	Maximum	90	94	90	84	82	76	84	85	84	80	81	86	83	86	85	88	78	72	78	77	85	66	81	75	73	75	72	68	77	74	78	80.2
	Minimum	68	69	67	71	59	61	58	60	62	59	63	67	59	58	62	61	65	50	49	52	64	63	59	55	61	52	58	58	60	52	50	59.7
Pickens	Maximum	80	80	75	78	72	67	74	77	74	76	72	76	73	77	77	78	71	65	68	68	75	62	73	68	65	67	63	63	69	62	66	71.3
	Minimum	66	64	63	61	57	55	54	61	60	58	61	63	60	57	61	61	60	53	44	52	58	58	52	53	55	50	55	55	56	55	49	57.0
Wellsburg	Maximum	86	79	87	78	74	70	76	78	79	77	72	79	74	..	80	82	77	70	73	74	78	66	76	71	67	70	63	63	73	65	65	74.1
	Minimum	69	69	69	67	61	60	59	61	62	58	64	64	63	..	61	63	62	49	48	54	64	61	58	59	56	55	52	55	58	52	41	59.1
Weston§	Maximum	90	88	88	82	78	80	82	80	82	80	80	84	80	82	80	84	85	70	74	78	76	80	78	76	70	72	74	75	76	70	68	78.8
	Minimum	66	68	64	70	52	50	52	60	61	64	68	60	58	60	58	60	53	48	52	60	54	56	58	55	52	58	56	58	58	52	54.0
Wheeling§	Maximum	91	84	92	82	82	74	85	87	91	89	80	90	85	92	88	95	81	83	84	78	84	68	88	78	75	81	62	66	81	74	77	82.2
	Minimum	70	71	71	69	62	61	59	62	61	60	62	67	62	62	63	63	64	49	47	50	56	62	57	59	55	54	56	57	57	59	44	59.7
Southern Division.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Bluefield	Maximum	88	87	80	82	80	77	82	83	..	81	78	82	82	85	82	86	80	73	72	70	78	73	81	80	76	80	73	66	73	74	69	....
	Minimum	67	66	70	65	62	54	52	57	..	61	65	65	63	59	65	60	63	63	58	61	65	59	50	55	64	50	57	55	56	56	55	....
Charleston	Maximum	94	95	93	90	88	85	87	92	89	89	84	90	87	90	89	92	89	82	80	79	78	81	86	83	78	80	72	73	83	78	75	84.9
	Minimum	71	69	70	70	61	62	59	62	64	68	68	69	64	65	66	67	68	61	52	53	61	65	57	58	62	56	58	62	61	61	55	62.7
Elkhorn	Maximum	89	89	82	81	80	72	79	80	79	79	77	78	78	82	82	85	81	73	73	71	75	74	79	78	74	75	71	62	71	69	67	76.9
	Minimum	63	60	65	66	62	55	52	53	60	62	64	64	60	56	60	57	60	63	54	61	62	61	58	54	62	49	58	56	56	54	56	58.8
Green Sulphur Spgs.	Maximum	92	94	86	85	83	75	77	88	84	84	78	83	85	88	89	90	83	79	77	71	84	79	87	78	81	70	66	73	68	72	78	80.9
	Minimum	64	63	63	64	58	52	56	51	60	61	61	64	60	58	61	62	62	52	63	56	47	62	51	52	47	54	55	58	57	57	45	57.3
Hinton§	Maximum	95	95	86	87	86	87	87	90	89	84	82	88	88	89	90	93	83	78	80	71	89	82	89	83	84	85	64	68	80	72	79	83.9
	Minimum	68	67	68	66	64	57	55	56	57	65	65	66	64	62	64	66	66	66	55	57	61	62	56	57	59	53	54	57	58	60	57	60.9
Holcomb§	Maximum	90	90	88	82	78	77	84	70	80	82	79	85	81	87	84	86	80	77	74	72	80	71	81	75	74	77	66	72	74	78	72	78.9
	Minimum	55	54	55	57	50	52	49	56	52	58	56	63	58	56	62	59	64	60	55	47	63	60	55	51	60	57	59	57	59	58	65	56.8
Huntington§	Maximum	92	89	88	84	77	79	86	83	88	82	86	82	83	87	86	87	81	72	75	71	71	80	82	80	78	77	65	69	74	65	71	79.7
	Minimum	72	72	69	68	60	62	61	65	65	67	69	67	62	61	64	68	69	59	52	58	62	65	57	60	61	57	57	61	58	61	54	62.7
Lewisburg	Maximum	89	90	83	82	80	72	80	85	82	80	76	81	80	82	82	85	79	75	76	70	80	75	78	76	73	79	70	63	75	70	72	78.1
	Minimum	65	62	64	65	57	51	48	52	59	59	62	63	60	56	62	60	61	61	56	57	62	63	59	52	62	46	56	56	56	59	50	57.8
Madison§	Maximum	90	93	92	86	80	79	86	89	85	85	84	86	85	88	86	89	82	80	79	74	78	..	..	..	..	..	84	69	..	..	..	83.9
	Minimum	70	70	68	70	64	60	60	62	65	65	67	68	64	65	65	68	68	64	54	55	63	65	..	..	..	..	..	58	60	..	..	64.1
Marlinton	Maximum	80	81	80	79	76	72	74	76	76	74	68	74	73	78	77	78	72	70	68	64	74	68	74	70	68	70	68	58	68	67	66	72.3
	Minimum	60	66	62	66	64	48	50	52	56	58	62	60	62	56	60	59	58	58	47	51	58	58	50	52	54	44	52	52	54	52	48	55.8
Point Pleasant	Maximum	94	86	91	85	78	80	88	89	89	86	85	85	86	90	86	92	85	75	78	72	72	78	87	82	77	78	70	72	78	71	74	81.9
	Minimum	68	70	67	66	55	59	59	61	61	61	65	65	58	58	61	62	66	51	46	53	64	62	51	55	56	50	57	58	56	55	46	58.9
Powellton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Robertsburg§	Maximum	94	84	93	85	75	80	85	85	87	85	89	85	82	90	85	90	80	73	75	73	73	75	85	80	75	77	65	69	75	69	73	80.4
	Minimum	66	68	57	66	58	58	58	68	60	56	60	65	68	59	52	58	67	55	50	52	60	62	54	55	58	52	58	58	56	59	52	58.9
Ryan	Maximum	93	92	90	85	88	76	87	85	88	85	83	84	83	86	87	88	85	83	75	75	75	74	85	73	70	76	67	68	78	74	74	81.0
	Minimum	67	65	66	65	60	56	56	60	59	58	59	65	55	58	56	59	58	59	54	55	52	53	52	58	59	46	57	57	56	54	54	57.4
Spencer§	Maximum	88	86	91	86	79	75	84	84	80	79	87	85	84	85	84	87	82	72	76	75	80	70	80	76	77	80	77	76	77	70	70	80.1
	Minimum	68	68	67	68	56	55	55	60	59	69	65	63	55	57	55	56	57	52	45	47	65	65	52	54	56	57	58	57	57	59	52	58.4
Union§	Maximum	..	..	..	..	81	70	81	82	82	83	72	80	82	85	83	87	80	73	75	73	80	83	83	78	82	83	64	72	78	74	..	78.7
	Minimum	..	..	..	..	..	52	49	52	61	60	62	64	61	56	62	59	62	64	54	59	60	48	49	51	60	46	48	56	55	59	54	56.3
White Sulphur Spgs.	Maximum	89	88	80	83	80	74	82	81	82	81	75	82	80	83	79	78	80	71	74	68	81	77	81	76	75	77	69	62	74	76	75	77.8
	Minimum	64	63	63	66	57	49	47	50	59	58	60	65	61	56	62	60	63	60	53	55	63	65	51	51	59	47	54	56	56	60	50	57.5
Williamson§	Maximum	91	92	90	85	80	77	88	89	88	83	83	84	85	89	87	90	78	73	75	75	80	80	83	80	80	80	71	75	75	69	72	81.5
	Minimum	72	71	70	70	65	63	62	64	69	69	70	60	65	66	67	69	69	66	58	58	66	61	60	61	65	60	62	62	62	62	56	64.5

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


No Rain
No Rain
No Rain
No Rain
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

NWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

SEPTEMBER, 1915

BY

HENRY C. HOWE
SECTION DIRECTOR

NOV 2 1915

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
OCTOBER 20, 1915

Departure of the Mean Temperature from the Normal, September, 1915.


-3°
-6°
-6°
-3°
-3°
+3°
+3°
+

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIII. PARKERSBURG, W. VA., SEPTEMBER, 1915. No. 9.

GENERAL SUMMARY.

September was considerably warmer and much wetter than usual, with an excess of sunshine, making the conditions exceptionally favorable for maturing crops, which were about two weeks late at the beginning of the month, owing to a wet, cool August. The rainfall was well distributed. While frosts occurred in many sections from the 23d to the 29th, no material damage resulted, and a large yield of corn, potatoes, grains, and fruit was secured.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.10 and 30.13 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.38 inches on the 22d, and 29 73 inches on the 21st. Elkins, 30.45 inches on the 25th, and 29.70 inches on the 21st.

TEMPERATURE.

The monthly mean for the State, 49 stations reporting, was 67.6°. The mean departure from the normal for 41 stations having ten or more years of record was + 1.3°. The month opened cool, but warmer weather set in on the 4th and the temperatures were continuously above the normal from the 5th to the 21st, with the daily averages generally from 10° to 15° in excess from the 8th to the 18th. Moderately cool weather prevailed after the 21st, except the 25th and 26th, especially on the 22d, 23d, 24th, and 29th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 85 per cent; 8 p. m., 79 per cent. The September averages for the same hours for the past 27 years are 84 and 71 per cent, respectively. Elkins, 8 a. m., 92 per cent; 8 p. m., 82 per cent. The September averages for Elkins for the same hours for the past 14 years are 92 and 84 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 57 stations reporting, was 3.84 inches. The mean departure from the normal for 46 stations having ten or more years of record was + 1.19 inches. The rainfall was lightest over the northern, southern, southwestern, and eastern panhandle counties, and heaviest over the middle Great Kanawha basin. Showers were general in many sections daily from the 3d to the 8th, 17th to the 21st, and 27th and 28th, with scattered light showers on several other days, and excessive rain set in during the last night of the month. Moderately heavy rain was also recorded on the 4th, 21st, and 27th.

WIND.

The average wind velocity at Parkersburg was 4.0 miles per hour, or 0.4 mile below the September average for 25 years. The average at Elkins was 2.8 miles per hour, or normal as compared with the September average for 15 years. The highest velocity at Parkersburg was 23 miles per hour from the southeast on the 5th, and at Elkins 18 miles per hour from the southeast on the 5th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 66 per cent of the possible amount, or 9 per cent above the September average for 17 years. The average at Elkins was 55 per cent, or 4 per cent above the September average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 20th, 22d, 23d, 24th, 25th, and 30th; Charleston, 1st, 9th, 23d, 24th, 25th, and 30th; Creston, 20th, 23d, and 25th; Davis, 11th, 21st, and 27th; Elkins, 1st, 9th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 20th, 23d, 24th, 25th, 29th, and 30th; Grafton, 1st, 2d, 3d, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 14th, 15th, 16th, 20th, 21st, 22d, 23d, 24th, 25th, 26th, 28th, 29th, and 30th; Green Sulphur Springs, 1st, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 24th, 25th, 26th, 27th, 28th, 29th, and 30th; Hinton, 1st, 6th, 8th, and 12th; Huntington, 2d, 20th, 23d, 24th, and 25th; Lewisburg, 23d, 24th, and 25th; Mannington, 1st, 2d, 7th, 9th, 10th, 11th, 12th, 13th, 16th, 23d, 25th, and 26th; New Cumberland, 13th, 14th, 15th, 16th, 17th, 20th, and 23d; Nuttallburg, 28th; Parkersburg, 10th, 18th, and 20th; Philippi, 23d, 28th, and 29th; Piedmont, 28th, 29th, and 30th; Point Pleasant, 7th, 12th, and 18th; Robertsburg, 25th; Romney, 1st, 8th, 14th, 23d, 25th, and 28th; Wheeling, 1st, 2d, 12th, 13th, 14th, 16th, 23d, and 25th.

Frost, light: Davis, 2d, 23d, 24th, and 25th; Elkins, 24th; Evans, 23d; Green Sulphur Springs, 22d and 23d; Lewisburg, 23d, 24th, and 25th; Lost Creek, 23d; Marlinton, 1st and 23d; Mannington, 29th; White Sulphur Springs, 22d and 23d.

Frost, heavy: New Cumberland, 29th.

Frost, killing: Bayard, 23d and 24th; Philippi, 22d and 23d.

Halo, lunar: Elkins, 25th.

Haze, light: Bayard, 1st and 25th.

Thunderstorms (dates and number of stations reporting): 5th, 1; 7th, 2; 8th, 1; 9th, 4; 10th, 2; 11th, 3; 12th, 2; 13th, 6; 14th, 2; 15th, 2; 17th, 5; 18th, 10; 19th, 7; 20th, 2; 21st, 3; 27th, 1.

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature.			Precipitation.			Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Clear.	Partly cloudy.	Cloudy.
1891	66.8	...	...	1.66	...	...	..	..	..
1892	64.4	92	32	2.57	...	...	..	..	..
1893	65.0	91	29	2.28	4.50	1.65	..	..	..
1894	67.8	98	31	2.50	4.75	1.25	12	11	7
1895	70.3	107	29	1.70	4.25	0.42	17	8	5
1896	65.2	95	22	4.59	9.04	1.58	11	9	7
1897	66.4	103	27	1.14	4.00	0.02	22	6	2
1898	67.6	97	33	2.42	4.75	0.80	16	10	4
1899	64.0	100	26	3.65	6.35	1.65	14	9	7
1900	71.1	100	35	1.52	5.50	0.34	14	10	6
1901	64.8	95	27	3.35	7.64	1.46	13	8	9
1902	64.8	98	25	2.98	4.81	1.23	12	9	9
1903	64.7	97	25	1.30	2.78	0.10	21	6	3
1904	64.0	95	25	1.76	4.55	0.53	16	10	4
1905	65.6	97	29	2.21	4.21	0.54	18	8	4
1906	69.9	97	38	3.25	5.44	0.57	12	10	8
1907	66.3	93	30	4.41	7.10	2.00	12	10	8
1908	65.9	99	24	0.95	2.54	0.26	21	6	3
1909	65.7	95	28	2.74	8.75	0.63	15	9	6
1910	68.4	97	32	3.50	6.04	0.50	12	11	7
1911	68.8	100	32	4.67	8.30	1.89	12	11	7
1912	68.6	98	30	3.85	9.18	1.13	17	7	6
1913	64.2	100	25	2.88	6.38	0.86	14	7	9
1914	63.2	97	24	1.58	5.65	0.17	18	6	6
1915	67.6	100	31	3.84	7.18	2.00	16	8	6
Means and Extremes	66.5	107	22	2.71	9.18	0.02	15	9	6

Climatological Data for September, 1915.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	
Panhandle Division.																			
Bayard [b]	Grant	2,500	12	61.8	+1.4	87	14 †	31	23	40	3.79	+0.64	1.54	0	6	19	6	3	w.	Solomon Clark
Burlington	Mineral	875	20	66.1	+1.3	90	14	36	23	34	2.95	+0.09	.....	0	6	9	17	4	sw.	J. W. Vandiver
Franklin	Pendleton	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	William McCoy
Harpers Ferry	Jefferson	244	25	.....	.....	.....	.....	.....	.....	.....	2.12	−0.73	0.95	0	5	.....	.....	.....	.....	S. W. Lightner
Lost City	Hardy	.....	8	62.8	.....	84	7	36	23 †	28	2.33	.....	0.78	0	6	12	11	7	s.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	69.2	+2.7	95	15	39	30	34	2.49	−0.30	1.50	0	7	20	7	3	s.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. S. Henkel
Piedmont	Mineral	919	0	68.7	.....	96	15	41	23	33	2.00	.....	0.83	0	9	16	3	11	nw.	C. A. Suter, Jr
Romney	Hampshire	824	17	69.4	+3.0	100	13	36	23 †	43	4.29	+2.01	2.16	0	5	13	17	9	.....	Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	66.0	−0.2	90	11 †	35	23	40	2.17	−0.13	0.82	0	5	13	13	4	w.	J. M. Mallow
Averages and	Extremes	.....	.....	63.3	+1.6	100	13	31	23	43	2.77	+0.26	2.10	0	6	15	10	5	s.	
Northern Division.																				
Bens Run	Pleasants	622	13	70.0	+1.8	96	13	42	30	34	3.99	+1.77	0.82	0	12	20	6	4	.....	J. D. Riggs
Brandonville	Preston	1,809	1	.....	.....	.....	.....	.....	.....	.....	2.70	.....	1.70	0	8	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	65.4	+0.8	89	13	35	23	35	4.74	+1.73	1.22	0	9	21	8	1	.....	H. A. Darnall
Cairo	Ritchie	674	12	68.6	+0.7	92	14 †	40	29	39	4.91	+2.46	1.55	0	10	11	16	3	sw.	Van A. Zevely
Central Station	Doddridge	950	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. W. Sherwood
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	3.82	.....	1.80	0	7	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	13	70.6	+3.1	98	13	41	23	40	5.84	+3.49	1.10	0	11	14	7	9	sw.	J. M. Teed
Davis	Tucker	3,093	7	.....	.....	.....	.....	.....	.....	.....	4.52	.....	2.49	0	10 †	17	6	7	sw.	Ross C. Male
Elizabeth	Wirt	646	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	15	65.8	+3.9	89	14	37	23	38	3.04	+0.17	1.33	0	13	7	14	9	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	68.7	+1.4	96	14 †,	40	23 †	37	2.99	+0.38	0.99	0	11	25	0	5	w.	F. P. Hall
Glenville	Gilmer	738	25	70.6	+3.0	95	14	41	1 †	43	4.88	+1.45	1.00	0	9	19	5	6	s.	M. T. Brannon
Grafton	Taylor	1,000	22	68.0[a]	−1.4	94 [a]	13 †	39	23 †	36[a]	5.49	+2.65	1.96	0	8	21	3	6	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	67.6	+2.4	93	14 †	36	23	40	2.42	−0.44	1.34	0	11	19	5	6	w.	Allen Smith
Mannington	Marion	974	12	66.9	+1.3	90	14	36	29	35	3.62	+0.47	1.27	0	14	16	7	7	w.	Jas. A. Morgan
Morgantown [b]	Monongalia	1,250	40	68.4	+0.8	92	13 †	38	29	34	3.28	+0.17	1.33	0	.....	15	7	6	sw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Z. White
New Cumberland	Hancock	987	15	66.6	+1.0	93	17	31	29	36	2.98	−.57	0.75	0	9	12	15	3	sw.	M. F. Smith
New Martinsville	Wetzel	634	21	70.0	+1.2	94	14	42	23 †	36	4.92	+2.38	1.20	0	12	16	10	4	s.	Wm. Ankrom
Parkersburg	Wood	638	26	69.4	+3.3	92	13	43	23	29	4.19	+1.47	2.42	0	14	17	6	7	se.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	65.1	−1.6	88	14	37	24	40	4.75	+1.58	1.10	0	7	17	12	1	.....	J. W. Swisher
Philippi	Barbour	1,149	22	67.5	+1.9	93	13	39	29	36	4.58	+1.42	1.23	0	10	15	12	3	w.	J. D. Dadisman
Pickens	Randolph	2,697	24	64.0	+2.2	89	15	36	22 †	31	4.78	+0.18	1.13	0	12	16	9	5	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	.....	.....	.....	.....	.....	.....	.....	4.32	−1.51	2.20	0	9	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	.....	.....	.....	.....	.....	.....	.....	3.40	.....	1.55	0	9	.....	.....	.....	.....	J. O. Goodman
Smithfield	Wetzel	835	10	68.0	.....	92	15	38	28	39	3.74	+0.49	1.05	0	10	15	13	2	nw.	G. M. Whisler
Terra Alta	Preston	2,612	14	65.2	−2.2	84	14 †	38	26 †	32	3.20	−0.43	1.56	0	6	18	1	11	w.	H. C. Shaffer
Wellsburg	Brooke	1,225	20	65.9	−1.1	85	13 †	38	29	26	3.21	+0.35	0.75	0	11	14	13	3	w.	C. P. Waugh
Weston	Lewis	1,026	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss C. M. Davis
Wheeling	Ohio	645	30	70.9	.....	97	13 †	40	29	39	2.63	+0.07	0.80	0	8	18	6	6	s.	Miss M. B. Forsyth
Averages and	Extremes	.....	.....	67.8	1.7	98	13	31	29	43	3.92	−1.07	2.49	0	10	17	8	5	w.	
Southern Division.																				
Bancroft	Putnam	574	11	69.0	0.9	92	13 †	41	23	35	5.33	+2.69	1.24	0	9	16	1	13	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	67.5	+4.1	88	17	38	24	39	5.07	+2.14	1.35	0	10	19	6	5	w.	John A. Ewart
Bluefield	Mercer	2,558	20	66.5	+0.3	87	13	40	22	32	2.48	−0.25	0.95	0	7	16	5	9	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	71.2	+0.7	96	14	43	23	37	4.82	+1.90	1.80	0	9	13	4	13	w.	C. V. Lewis
Clay	Clay	706	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba ††	Jackson	650	14	67.3	+0.2	88	12	39	22 †	35	4.34	+1.17	1.75	0	9	12	13	5	w.	C. T. Perry
Dam 22 O. R.	Jackson	538	..	.....	.....	.....	.....	.....	.....	.....	2.74	....	0.70	0	10	.....	.....	.....	....	U. S. Engineer Office
Dunlow	Wayne	703	7	.....	.....	.....	.....	.....	.....	.....	2.61	.....	1.17	0	7	20	7	3	e.	George Damron
Elkhorn	McDowell	1,933	22	68.0	+1.6	88	14	42	22 †	29	3.59	−0.79	0.74	0	11	10	16	4	nw.	J. J. Lincoln
Evans	Jackson	606	0	.....	.....	.....	.....	.....	.....	.....	3.97	.....	1.11	0	10	19	0	11	.....	B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	67.6	+1.4	91	11	34	22 †	47	5.09	+1.94	1.30	0	9	19	4	7	s.	W. H. Gwinn
Hinton	do	1,450	25	69.6	+1.4	93	12 †	40	22	57	2.92	+0.22	0.86	0	10	16	1	13	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	66.2	.....	92	12	35	23	42	4.35	.....	1.21	0	7	19	4	7	.....	R. E. Ferguson
Huntington	Cabell	538	19	68.5	−0.2	90	11 †	43	24	32	2.84	−0.46	0.66	0	10	19	5	6	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	65.2	+0.5	85	10 †	34	24	35	4.01	+1.31	1.47	0	9	16	6	8	sw.	Geo. T. Argabrite
Logan	Logan	687	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Oliver, Jr
Madison	Boone	704	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	61.5	−1.1	81	18	34	23	31	4.10	1.08	1.23	0	9	7	16	7	sw	S. L. Brown
Nuttallburg [f]	Fayette	2,252	22	63.0	−2.4	82	8	38	23	22	7.18	+4.56	2.00	0	6	15	6	3	....	Miss Donna Tully
Point Pleasant	Mason	553	24	69.7	0	86	13	39	22	38	3.53	+1.32	1.34	0	10	14	4	12	sw.	W. D. Holmes
Powellton [b]	Fayette	933	17	69.8	+2.7	92	12 †	41	24	34	.....	.....	.....	.....	.....	2	26	2	.....	F. L. Evans
Robertsburg	Putnam	574	14	69.4	+0.8	96	13	38	23	41	4.45	+2.09	1.10	0	12	19	3	8	.....	E. C. Brace
Ryan	Roane	709	11	67.9	−1.4	93	12	37	23	40	6.82	+4.42	1.80	0	11	14	6	10	.....	Wm. E. Ryan
Spencer	do	784	16	67.2	.....	90	12 †	36	24	39	4.02	+1.57	1.00	0	9	12	15	3	.....	A. M. McKown
Sutton	Braxton	839	11	71.6[e]	.....	96	13 †	41	23	43	4.83	+1.72	1.10	0	10	17	11	2	.....	Ben Gillespie
Union	Monroe	2,250	10	67.5[e]	−2.4	90 [a]	11 †	36	23	46[a]	4.22	+1.76	1.50	0	7	.....	.....	.....	.....	J. C. Shanklin
White Sulphur Springs	Greenbrier	1,940	5	65.0	.....	84	11	36	24	35	3.80	.....	1.81	0	7	21	2	7	sw.	J. M. Ayres
Williamson	Mingo	660	13	71.7	+1.8	93	13 †	46	26	31	3.28	+0.42	1.12	0	11	16	9	5	w.	J. F. Keyser
Averages and	Extremes	.....	.....	67.8	+0.9	96	13 †	34	22 †	47	4.13	+1.65	2.60	0	9	16	7	7	sw.	
State Averages and	Extremes	.....	.....	67.6	+1.3	100	13	31	23 †	47	3.83	+1.18	2.19	0	9	16	8	6	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for September, 1915.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bard	Potomac			T.	T.		.04		T.					.10	T.			.55	1.54			1.08						.48					3.79
Bluefield	do					.25		.15						T.				T.	*	2.10		.30						.15					2.95
Franklin	do																																
Harpers Ferry	do			T.		.10	.12														.95		.90			.05						2.12
Keyser	do	.03				.30	.55							.02					.65		.78											2.33
Martinsburg	do		T.			.21	.15				.10					T.			*	1.50		.48				.05						2.49
Piedmont	do		T.		.01	.01	.29		.17									.01	.24	.83		.35						.09					2.00
Rowlesburg	do		T.		T.		.36							1.00					2.10			.67						.16					4.29
Upper Tract	do			T.	.40					.25									.30	.82		.40											2.17
Southern Division.																																	
Big Run	Ohio			.15	.75	.50	.26	.54		.03		.20						.15	.02	.32	.82								.25				3.99
Bronnonville	Monongahela						.19		.14		.16		.04						.10	1.30		.27						.50					2.70
Shannon	do			T.	.55	.07		.25	.45					.90				T.	.25	.70		1.22						.35					4.74
	Little Kanawha			.28	.91	.17	.43		.24	.58	.06								.15	1.55								.54					4.91
Coal Station	Middle Is. Creek																																
Grand	Monongahela					.08				.41		.29				.22				1.80		.46						.56					3.82
Hilton	Little Kanawha			.31	.72	1.10	.10	.17	.81		.20								.50	1.01		.32						.60					5.84
Jere	Monongahela			.04	.02	.04	.03			.63	.04								T.	2.49	.02	.65						.56					4.52
Kenova	Little Kanawha																																
Keyser ***	Monongahela		.10		.14	T.		.19	.04					.01	.05			T.	.06	1.27	.04	.63						.14			.25		3.04
Piedmont	do			T.	.04	.08	T.	.30	.04	.13	.01		.04						.51	.99		.45						.40					2.99
Pineville	Little Kanawha			.25	1.00	.48	.50	.20	.60											.60		.90						.35					4.68
Prunedale	Monongahela			.40	.02				.26									1.06	.42	1.96	.56							.41					5.49
Quiet Creek	do			.04	.22	.12	.09	.10	.31			T.		T.				.03	.32	1.02		.11						.06					2.42
Remington	do			.01	.15	.05	.13	.27	.20	.07	.04		.12					.59	.55	.72		.27						.45					3.02
Rivesville	do					.25		.06	.31				*	*	*	*	*	.88	.12	.33								1.33					3.28
Ridgeville	Ohio																																
St. Cumberland	do				T	.14	.40	.08	.02		.11								.75			.08					.45	.05					2.08
St. Martinsville	do				1.20	.10	.60	.05	.15	.02	.35		.15						.88	.87		.10						.45					4.92
Parkersburg ***	Ohio		.04	.40	.65	.27	T.	.16	.02	.03		.01						.02	1.50		.12					.13	.09			.75		4.19
Parsons	Monongahela			T.				.95	.05					.55				.50		.1						.55	.45					4.75
Philippi	do			.14	.09			.03	.24					.14		T		.08	1.08	1.2		.44					.51					3.58
Pickens	do		.06	.11	.54	.10		.15						.20	.41				.50	1.15		.96						.51			.11		4.78
Pinesburg	do				.02	.04	.08			.10									.02	2.20	.02	.70						.50					4.32
Point Marys	Ohio			.22	.61	.37	.05	.05			.05									1.55	.06							.45					3.40
Pomfield	Fishing Creek			.05	.12	.15	.05	.4	.1	.41										1.05		.41						.31					3.74
Pt. Alta	Monongahela		.45	.12														1.56	45		.30				.12							3.20
Pocahontas	Ohio				.05	.18	.43	.16	.34		.38							T.	.65	.12		.05				.75	.10						3.21
Portland	Monongahela																																
Pursley	Ohio				T.	.12	.5	T.	.01		.20								.35	.65		.05						.80					2.63
Northern Division.																																	
Arcroft	Great Kanawha			.37	.43	.56		.61											.04	.44		1.00					1.24	.64				5.33
Bailey	do			.50	1.00						.04	.38								.20		1.35					.25	.10	.30	1.00		5.07
Bluefield	do				.35	.50								.10						.20		.95							.18	.20		2.48
Charleston	do			.55	.54	.10	.20													.48	.20	.45					.80	1.00				4.82
Clendenin	do																																
Dingess	Sand Creek			.52	1.75	.28	T	.20	.05									T.	T.	.54		.18						.42			.30		4.34
Dry Fork R. R.	Ohio			.45	.35	.70	.16	.05	.20											.30		.15						.34	.04				2.74
Elkhorn	Big Sandy			.41	.17	.34	.06			.03												1.17									.37		2.61
Elkhorn	do			.09	.74	.26	.30						.51	.12						.12		.58						.11		.12	.74		3.59
Ellamore	Ohio			.53	.55	.35	.05	.45	.15											.22			.29			T.	1.11			.29		3.97
French Sulphur Spgs.	Great Kanawha			.46	1.50	.35	.15							T.						.15		.45						.48		.10	.65		4.09
Gilbon	do			.38	.86	.40	.16								.22				.10	.40		.08							.18	.14			2.92
Gloucomb	do			.14	1.21									.16					*	1.00		.90						.94					4.35
Huntington	Ohio			.38	.10	.56	.54	.20			T.								T.	.08	.02		.30						.42	.24				2.84
Lewisburg	Great Kanawha				1.47	.12							.52	.50						.20	.22		.15						.47		.06			4.01
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marmet	do		.16	.32	.98	.11	T.				T.								1.23	.04		.74						.21	T.	T.	.31		4.10
Middleburg	do				1.20							.28							.48		1.32						2.00		1.90			7.18
Mt. Pleasant	Ohio			.59	.04	.80	.50	.06	.06											.04		.10						1.12	.22				3.53
Paulton	Great Kanawha																																
Romney	do		.40	.21	.80	.08	.20	.54			.05								.42	.20		.29						1.10	.38				4.45
Rowlesburg	do		.18	1.80	.16		.17					.02						.79	.12	.53		.82						1.55	T.		.68		6.82
Shepherdstown	do																																
Spencer	Little Kanawha				.95	1.00	.10	.10	.25										.25	.42		.50						.45					4.02
Spencer	Great Kanawha		.27	1.10	.40	.30	.40	T.											.90	.50	.20	.55						.20					4.83
Sutton	do		.80	1.30	.25														.85			.25						.32		.45			4.22
White Sulphur Spgs	do		.59	1.81	.16									.10					T.			.03						.56		T.	.55		3.80
Williamson	Big Sandy		.45	.38	.14	.04				.01						.50			.03	.51		1.12						.02	.08				3.28

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‡ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for September, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Me
Panhandle Division.																																	
Bayard	Maximum	70	68	69	73	..	81	79	82	84	83	83	86	86	87	87	86	85	73	80	80	78	63	68	70	75	73	68	65	65	..	..	76.
	Minimum	37	37	52	55	..	58	53	54	55	55	55	58	53	55	52	51	54	50	42	40	50	38	31	32	37	46	40	37	37	..	..	45.
Burlington	Maximum	80	79	78	82	83	83	83	81	87	85	87	87	88	90	89	87	88	79	78	81	72	65	67	67	75	77	69	64	63	68	..	78.
	Minimum	46	45	50	60	61	58	62	62	60	62	60	62	61	63	60	59	62	64	60	58	61	41	36	38	45	50	44	37	39	40	..	53.
Martinsburg§	Maximum	71	73	81	81	85	85	87	86	93	90	93	90	94	92	95	92	93	84	82	83	69	69	70	77	77	76	66	69	70	69	..	81.
	Minimum	48	49	57	60	63	66	69	66	64	65	66	66	67	68	66	62	64	70	66	58	60	46	41	43	44	52	45	41	40	39	..	57.
Piedmont	Maximum	74	71	74	76	79	84	84	82	95	88	89	92	86	93	96	92	90	80	81	84	64	71	74	70	77	78	64	66	67	66	..	79.
	Minimum	48	50	58	60	65	68	62	63	68	62	66	68	65	67	65	65	66	68	69	56	62	47	41	43	51	55	46	44	42	44	..	57.
Romney	Maximum	76	74	78	80	84	89	91	86	96	95	94	95	100	97	98	97	90	91	84	89	81	72	75	81	86	80	81	68	69	70	..	84.
	Minimum	43	46	50	60	60	65	62	61	64	65	63	69	65	64	61	60	62	69	62	54	54	46	36	40	43	51	42	36	40	41	..	53.
Upper Tract	Maximum	72	69	77	75	78	83	85	83	83	87	90	90	84	84	89	88	89	89	80	83	73	65	68	78	79	78	77	63	65	66	..	79.
	Minimum	42	42	55	59	58	58	56	55	58	60	60	59	60	63	60	57	59	60	63	53	55	48	35	38	43	46	50	47	46	43	..	52.
Northern Division.																																	
Bens Run	Maximum	78	74	78	70	86	88	83	88	88	86	86	90	96	91	91	90	87	86	86	82	71	70	68	78	77	81	77	73	68	73	..	81.
	Minimum	50	50	58	65	64	62	65	65	65	66	61	64	68	67	66	68	67	65	65	60	54	46	44	48	53	59	47	45	42	..	..	58.
Buckhannon	Maximum	76	74	76	70	85	83	80	83	85	84	85	86	89	87	86	85	85	84	84	81	69	60	68	70	74	77	66	72	68	73	..	78.
	Minimum	41	41	53	54	60	60	60	58	58	62	56	60	60	60	60	57	58	62	62	51	51	39	35	36	54	51	45	50	39	40	..	52.
Creston	Maximum	74	81	75	72	85	85	86	91	89	93	91	97	98	97	97	96	95	91	84	85	74	73	76	83	87	83	75	71	75	74	..	84.
	Minimum	45	47	56	65	63	67	63	61	62	64	64	65	65	65	63	63	64	67	67	56	57	44	41	44	47	54	50	47	42	43	..	56.
Elkins	Maximum	75	74	78	73	80	81	81	84	85	84	85	88	87	89	89	87	84	83	76	82	67	63	70	71	82	75	66	68	72	68	..	78.
	Minimum	41	43	54	61	63	62	58	58	59	63	61	62	60	61	59	58	59	63	57	54	48	39	37	37	44	53	49	45	43	44	..	53.
Fairmont§	Maximum	81	79	77	76	88	87	86	90	92	91	92	95	95	96	95	93	91	88	84	85	64	70	69	78	80	79	64	68	70	77	..	82.
	Minimum	45	45	49	61	62	65	63	62	62	61	62	64	63	64	63	63	62	65	65	57	56	44	40	41	44	49	45	42	40	41	..	51.
Glenville	Maximum	84	83	76	77	86	85	85	90	91	90	91	94	93	95	94	92	92	90	82	86	85	72	75	80	85	83	79	71	76	75	..	84.
	Minimum	41	47	56	65	64	64	64	62	64	64	65	65	65	66	65	63	64	67	68	58	57	42	41	42	48	55	43	47	43	43	..	56.
Grafton	Maximum	79	78	76	76	86	84	84	86	90	88	88	92	94	94	93	92	89	84	82	..	68	65	73	77	82	81	74	67	73	74	..	81.
	Minimum	46	46	58	61	62	64	63	61	62	61	62	64	63	64	63	61	61	65	61	50	41	40	39	41	49	53	45	41	39	44	..	54.
Lost Creek	Maximum	76	75	78	72	87	83	81	87	88	89	87	91	91	93	93	91	88	86	84	82	74	67	71	77	84	81	74	65	70	74	..	81.
	Minimum	43	42	56	62	61	63	60	68	61	61	63	62	61	62	60	61	64	56	59	55	39	36	39	44	55	46	42	38	40	..	..	54.
Mannington	Maximum	77	76	76	74	86	82	82	85	87	84	86	88	89	90	89	89	87	83	77	81	72	65	70	74	79	78	73	65	69	71	..	79.
	Minimum	42	43	56	60	61	66	61	60	61	62	62	65	61	63	62	63	60	68	66	55	55	40	38	39	47	53	45	39	37	38	..	54.
Morgantown	Maximum	74	73	73	73	79	82	82	85	88	86	87	90	92	92	..	89	87	82	77	82	75	61	69	72	84	..	76	64	71	69	..	79.
	Minimum	47	51	62	62	65	66	65	65	69	62	63	64	69	64	..	68	67	66	64	55	52	44	42	46	50	..	56	42	38	48	..	57.
New Cumberland	Maximum	76	79	81	72	79	80	84	88	89	86	88	90	92	92	92	90	93	86	78	82	74	68	72	73	81	72	60	64	66	68	..	79.
	Minimum	41	44	56	59	62	63	61	64	66	61	65	62	64	63	66	61	64	62	58	48	51	40	35	46	45	56	36	37	31	35	..	53.
New Martinsville	Maximum	80	82	81	71	86	84	86	89	88	89	89	92	93	94	93	92	88	88	83	82	71	70	74	79	84	78	75	69	71	70	..	82.
	Minimum	51	51	59	63	64	66	64	64	65	65	65	65	66	67	66	66	65	67	67	59	54	43	42	43	50	57	46	43	42	44	..	57.
Parkersburg	Maximum	78	73	70	72	81	84	84	89	90	87	89	90	92	91	91	88	86	89	81	68	64	71	76	80	79	61	64	69	70	..	..	79.
	Minimum	50	52	57	66	65	65	65	66	67	65	66	66	69	72	71	69	69	68	64	59	52	48	43	47	51	56	50	47	45	47	..	59.
Parsons	Maximum	70	69	71	71	77	83	79	80	83	83	84	85	87	88	87	86	83	80	79	75	66	67	68	77	74	76	65	65	72	70	..	76.
	Minimum	55	52	54	58	58	61	60	60	60	62	63	64	60	61	58	57	59	60	60	55	50	50	38	37	40	42	51	39	40	41	..	53.
Philippi	Maximum	72	74	78	75	85	84	83	86	88	86	88	90	93	90	92	90	88	83	77	83	72	65	72	76	81	78	73	66	72	72	..	80.
	Minimum	51	42	42	61	66	64	64	61	61	62	61	62	62	63	62	61	62	65	65	56	54	41	40	41	46	54	45	44	39	40	..	54.
Pickens	Maximum	72	71	74	67	75	75	74	78	78	80	84	88	85	85	89	86	78	77	70	75	66	57	61	67	76	72	67	63	68	66	..	74.
	Minimum	42	44	51	62	63	60	61	58	59	64	59	62	61	65	58	58	60	60	61	52	48	36	36	39	45	54	52	50	48	48	..	53.
Terra Alta	Maximum	81	80	78	78	73	76	78	68	76	72	71	80	82	84	81	76	74	75	70	72	71	72	73	70	72	70	70	70	..	75.
	Minimum	62	60	61	60	66	66	58	56	56	60	58	67	62	69	68	66	64	60	60	50	40	50	45	48	46	38	45	38	42	44	..	55.
Wellsburg	Maximum	73	76	77	70	79	76	78	82	83	80	82	84	85	85	85	85	81	80	73	76	68	62	65	70	74	73	61	62	63	67	..	75.
	Minimum	48	50	60	62	63	63	62	65	68	63	66	64	67	68	69	67	61	64	62	55	50	45	44	49	50	56	40	39	38	41	..	56.
Weston§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wheeling§	Maximum	85	83	83	83	88	85	91	94	95	93	93	95	97	96	96	97	95	88	85	85	60	74	76	78	84	79	70	74	76	76	..	85.
	Minimum	46	51	52	59	60	64	63	66	66	64	65	67	67	67	68	67	65	66	65	56	55	42	44	45	47	54	45	41	40	41	..	55.
Southern Division.																																	
Beckley	Maximum	73	83	78	77	82	81	80	85	85	79	80	83	85	84	84	85	88	81	80	80	75	73	74	75	75	74	74	79	74	77	..	79.
	Minimum	52	60	60	58	60	60	69	63	60	60	61	62	61	45	55	61	60	60	62	62	45	39	43	38	41	51	52	55	55	54	..	55.
Bluefield	Maximum	74	72	70	68	67	81	80	82	85	84	85	83	87	86	85	85	83	82	75	81	75	61	65	73	76	78	76	80	72	60	..	77.
	Minimum	50	46	52	53	54	55	59	57	60	64	62	60	60	69	66	65	62	61	65	56	55	40	43	42	44	55	55	61	59	59	..	56.
Charleston	Maximum	84	83	76	76	86	88	88	92	91	91	91	95	95	96	94	94	91	91	85	86	81	75	76	77	84	82	76	75	75	70	..	84.
	Minimum	49	50	52	60	67	64	64	63	64	61	66	67	66	67	64	63	63	63	62	60	59	45	43	44	47	51	51	50	51	50	..	57.
Elkhorn	Maximum	74	72	67	68	80	78	80	83	85	85	84	86	87	88	85	86	84	82	80	84	82	63	67	72	77	75	73	78	75	65	..	78.
	Minimum	50	49	56	64	65	59	60	58	59	63	62	60	62	67	63	62	63	61	66	58	62	42	42	44	48	50	62	62	62	53	..	57.
Green Sulphur Spgs.	Maximum	76	78	71	69	78	84	84	86	88	89	91	90	89	90	88	88	87	88	81	84	70	72	69	82	82	81	84	76	67	66	..	80.
	Minimum	51	46	54	61	62	60	59	58	59	63	61	60	64	60	58	57	60	61	62	56	52	34	34	35	40	48	57	56	55	51	..	54.
Hinton§	Maximum	80	81	69	68	80	83	87	90	89	91	90	93	93	92	91	91	94	90	84	87	70	71	73	78	82	82	70	78	66	61	..	81.
	Minimum	52	48	49	56	64	64	62	62	63	64	65	64	63	65	62	62	63	65	65	61	63	40	41	42	45	49	53	58	60	58	..	57.
Holcomb§	Maximum	80	80	78	81	79	82	84	86	88	87	89	92	90	90	89	89	87	86	82	83	63	65	70	75	82	81	63	72	70	67	..	80.
	Minimum	41	43	41	59	63	58	55	59	55	59	63	58	62	60	55	55	56	57	56	52	60	36	35	36	40	44	47	52	55	49	..	52.
Huntington§	Maximum	78	77	66	72	77	80	83	85	87	88	90	90	90	89	89	87	87	84	80	80	65	65	72	75	79	77	56	64	68	65	..	78.
	Minimum	48	49	55	60	65	64	65	65	65	65	68	68	67	68	67	66	67	67	68	60	58	46	44	43	49	52	54	52	49	49	..	58.
Lewisburg	Maximum	71	74	74	69	71	79	80	82	84	85	84	81	84	85	84	84	82	81	82	76	81	63	62	64	71	74	74	70	65	60	..	76.
	Minimum	46	46	48	54	64	60	58	58	58	64	58	61	60	60	64	57	59	61	60	63	56	53	36	34	36	43	46	57	56	50	..	54.
Madison	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marlinton	Maximum	67	68	68	64	70	73	74	78	79	78	79	80	79	80	78	79	78	81	71	72	68	58	58	66	68	70	66	67	60	54	..	71.
	Minimum	42	40	52	58	60	57	56	56	58	58	59	59	58	58	58	59	58	61	59	54	46	35	34	35	42	46	52	50	52	48	..	52.
Point Pleasant	Maximum	81	82	72	74	86	85	86	92	92	91	93	94	95	94	94	92	92	90	85	83	75	70	76	81	86	82	75	66	73	69	..	83.
	Minimum	43	46	54	62	64	62	62	62	62	63	64	64	64	65	65	64	64	65	67	57	55	39	40	44	48	55	47	47	40	42	..	55.
Powellton	Maximum	80	79	..	77	..	..	88	89	89	89	89	92	92	..	92	..	92	91	..	87	77	66	..	71	82	..	82	71	72	68	..	82.
	Minimum	48	50	..	60	..	..	60	60	61	66	63	66	64	..	62	..	60	64	..	66	57	42	..	41	48	..	52	55	55	56	..	57.
Robertsburg§	Maximum	84	80	75	80	87	84	89	90	91	93	92	95	95	93	94	95	92	87	82	84	65	70	75	75	80	84	60	65	71	75	..	83.
	Minimum	45	48	51	56	64	60	63	61	62	64	63	65	64	65	62	61	62	66	67	55	57	43	38	44	46	51	49	48	41	44	..	55.
Ryan	Maximum	80	79	76	72	85	82	85	89	88	85	89	93	92	96	90	89	90	86	83	83	69	69	72	76	81	80	74	66	73	78	..	81.
	Minimum	41	43	56	65	65	60	60	59	59	60	60	62	61	61	58	58	60	65	66	53	55	33	37	40	41	50	52	49	40	50	..	54.
Spencer§	Maximum	77	76	75	75	85	82	83	88	88	87	88	90	89	90	89	89	89	88	87	89	66	65	73	76	82	80	60	67	71	76	..	80.
	Minimum	41	42	46	60	65	65	60	60	60	62	56	62	62	68	61	60	61	66	66	53	57	38	36	37	43	51	59	47	42	41	..	53.
Union§	Maximum	74	80	72	78	78	82	82	84	87	88	90	80	89	89	90	88	87	87	81	83	69	68	72	77	82	79	70	77	63	..	..	80.
	Minimum	48	48	54	58	60	60	55	55	54	58	59	58	62	61	59	59	60	60	64	56	61	37	36	38	42	47	62	59	57	56	..	54.
White Sulphur Spgs.	Maximum	70	78	67	67	74	78	80	82	82	85	84	82	79	79	83	79	81	82	78	76	75	72	63	71	74	76	74	72	64	61	..	75.
	Minimum	44	44	54	62	63	61	57	58	57	63	60	62	61	62	60	56	60	61	63	63	56	44	40	36	46	51	45	46	55	51	..	51.
Williamson§	Maximum	82	78	67	73	87	83	87	90	90	91	91	92	93	93	90	92	85	89	82	87	68	68	75	77	85	80	68	70	68	68	..	81.
	Minimum	55	56	57	61	66	65	66	66	67	70	71	71	68	68	68	66	66	70	71	70	62	47	46	47	52	57	58	58	57	52	..	61.

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, September, 1913.



IWE

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

NOV 30 1915

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

OCTOBER, 1915

BY

HENRY C. HOWE

SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
NOVEMBER 20, 1915

Departure of the Mean Temperature from the Normal, October, 1915.



Shaded portions show excess (+). Unshaded portions show deficiency (—). Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

OL. XXIII. PARKERSBURG, W. VA., OCTOBER, 1915. No. 10.

GENERAL SUMMARY.

October was sunshiny and considerably warmer and wetter an usual. Excessive rain, in many sections ranging from ree to more than four inches, was received during the twenty- ur hours ending late on the 1st, causing overflows in the reams, especially in the Little Kanawha basin, and a flood age in the Little Kanawha river, and much corn and other ops were washed away on the bottom lands. Killing frosts ere general on the 10th. After the 12th the weather was pecially favorable for farm and other outdoor work. Pastures ere in good condition at the close of the month.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 0.14 and 30.17 inches, respectively. The highest and lowest eadings observed were as follows: Parkersburg, 30.48 inches n the 10th, and 29.67 inches on the 1st. Elkins, 30.50 inches n the 10th, and 29.68 inches on the 1st.

TEMPERATURE.

The monthly mean for the State, 50 stations reporting, was 5.6°. The mean departure from the normal for 39 stations aving ten or more years of record was + 1.9°. The month pened with normal temperatures, but warm weather for the ason prevailed from the 3d to the 5th, which was followed by uch cooler from the 6th to the 11th, with killing frosts on the 0th. Unusually warm weather for the season prevailed after ie 12th, except the 22d-24th and 30th-31st, when the temper- ures were nearly normal.

HUMIDITY.

The averages of the humidity readings at Parkersburg and El- ins at 8 a. m. and 8 p. m., with departures from the normals, ere as follows: Parkersburg, 8 a. m., 86 per cent; 8 p. m., 73 er cent. The October averages for the same hours for the ast 27 years are 83 and 70 per cent, respectively. Elkins, 8 . m., 91 per cent; 8 p. m., 81 per cent. The October aver- ges for Elkins for the same hours for the past 14 years are 89 nd 77 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 55 stations reporting, as 4.11 inches. The mean departure from the normal for 48 ations having ten or more years of record was + 1.06 inches. he rainfall was heaviest over the central western counties and ience eastward over the Little Kanawha basin and northern ctions of the Great Kanawha and southern sections of the Monongahela basins, and lightest over the southeastern counties. ver the eastern panhandle counties the monthly amounts were markably uniform, ranging generally from three to four inches. bout two-thirds of the rainfall recorded was received during the irty-six hours ending on the morning of the 2d. Showers were lso general on the 5th, 18-20th, and 26th, being moderately eavy in many sections on the 19th.

WIND.

The average wind velocity at Parkersburg was 4.3 miles per hour, or 0.7 mile below the October average for the past 26 years. The average at Elkins was 2.9 miles per hour, or 0.5 mile below the October average for 15 years. The highest velocity at Parkersburg was 18 miles per hour from the north- west on the 5th, and at Elkins 20 miles per hour from the west on the 29th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 61 per cent of the pos- sible amount, or 12 per cent above the October average for 18 years. The average at Elkins was 58 per cent, or 13 per cent above the October average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 3d, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 20th, 21st, 22d, 23d, 27th, 28th, 30th, and 31st; Burling- ton, 21st and 22d; Charleston, 7th, 11th, 12th, 15th, 16th, 17th, 18th, 20th, 21st, 22d, 23d, 25th, 26th, 27th, 28th, 29th, 30th, and 31st; Davis, 2d and 21st; Dam No. 22: 7th, 20th, 22d, and 23d; Elkins, 3d, 4th, 7th, 9th, 10th, 11th, 12th, 13th, 15th, 16th, 17th, 18th, 21st, 22d, 24th, and 28th; Evans, 15th and 16th; Fairmont, 22d; Grafton, 4th, 5th, 6th, 7th, 8th, 15th, 16th, 17th, 18th, 21st, 22d, 23d, 24th, 25th, 26th, 27th, and 28th; Hinton, 3d and 17th; Huntington, 16th, 21st, 22d, and 23d; Mannington, 3d, 4th, 7th, 13th, 17th, 18th, 19th, 20th, 21st, 22d, and 29th; Marlinton, 12th, 13th, 16th, and 27th; New Cumberland, 3d, 9th, 11th, 12th, 17th, 22d, 23d, 24th, 25th, 28th, 29th, and 31st; Parkersburg, 7th, 10th, 16th, 20th, and 22d; Philippi, 2d, 3d, 6th, 7th, 15th, 16th, 17th, 21st, and 27th; Piedmont, 4th, 7th, 16th, 20th, 21st, 27th, and 29th; Point Pleasant, 7th, 10th, 18th, and 20th; Robertsburg, 7th, 17th, 21st, 22d, 23d, 27th, and 31st; Romney, 3d, 4th, 11th, 13th, 14th, 15th, 22d, 25th. 26th, 27th, 28th, and 29th; Wheeling, 3d, 4th, 6th, 7th, 10th, 12th, 13th, 17th, 18th, 20th, 21st, 22d, 24th, 25th, 27th, 28th, and 31st; Williamson, 28th and 30th.

Halo, lunar: Ryan, 21st.

Haze: Bayard, 3d and 22d.

Sleet: Lost Creek and Smithfield, 9th.

Smoke: Pickens, 16th; Creston and Lost Creek, 16th and 17th.

Thunderstorms (dates and number of stations reporting): 4th, 3; 14th, 1; 15th, 1; 18th, 13; 19th, 3; 25th, 1; 26th, 5; 28th, 3; 29th, 3.

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.			Precipitation.			Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Clear.	Partly cloudy.	Cloudy.
1891	51.5	95	21	1.97	2.91	T.	..	..	..
1892	52.6	89	24	0.83	1.45	0.21	..	..	..
1893	54.1	86	16	4.74	7.22	1.00	21	6	4
1894	54.4	88	22	2.32	3.85	1.17	16	8	7
1895	48.1	89	8	1.29	3.25	0.16	22	5	4
1896	51.0	82	20	2.08	4.37	0.45	14	9	8
1897	58.2	95	22	0.53	2.27	0.07	18	7	6
1898	55.6	95	19	4.84	8.50	2.48	11	10	10
1899	56.8	91	19	1.42	3.81	0.23	15	7	9
1900	60.9	97	24	2.35	4.80	1.15	16	8	7
1901	54.3	86	19	0.54	1.95	0.12	19	6	6
1902	56.5	87	17	2.63	5.50	0.90	16	8	7
1903	54.2	96	15	2.55	4.75	0.80	17	7	7
1904	54.5	92	16	1.59	3.02	0.37	18	8	5
1905	54.2	95	19	4.71	8.26	2.46	13	8	10
1906	54.5	86	12	3.09	8.15	1.64	11	6	14
1907	50.3	87	19	2.65	5.12	0.54	15	9	7
1908	55.1	91	16	1.60	6.88	0.33	18	7	6
1909	50.0	88	14	2.79	5.27	0.60	16	7	8
1910	58.1	95	15	1.85	2.96	0.80	18	7	6
1911	59.3	88	23	5.28	9.65	3.27	12	7	12
1912	55.5	93	20	1.34	3.10	0.20	18	6	6
1913	54.5	92	12	4.50	8.11	1.78	12	6	13
1914	57.3	91	14	2.94	6.72	1.37	12	8	11
1915	56.6	89	20	4.11	5.55	0.74	17	7	7
Means and Extremes	54.6	97	8	2.58	9.65	T	16	7	8

Climatological Data for October, 1915.

Stations.	Counties.	Elevation. Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,500	12	50.8[e]	+1.7	77[d]	17	20[e]	24†	50[e]	3.69	+0.30	1.50	T.	6	15[d]	6[d]	6[d]	w.	G. C. Dixon
Burlington	Mineral	875	20	54.6	+1.0	79	15	25	25	42	4.20	+2.01	2.70	0	4	15	12	4	w.	J. W. Vandiver
Franklin	Pendleton		8																	William McCoy
Harpers Ferry	Jefferson	244	25								3.74	+0.90	1.55	0	7					S. W. Lightner
Lost City	Hardy		8	53.2		74	15	26	25	30	3.08		2.70	0	5	17	12	2		B. D. Hinegardner
Martinsburg	Berkeley	435	23	56.6	+2.1	83	15	31	25	41	3.16	+0.58	2.41	0	6	17	5	9	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20			84	4				3.17	+0.95	2.51	0	6	22	4	5		M. S. Henkel
Piedmont	Mineral	919	0	56.1		78	15	28	11†	42	3.90		2.94	0	8	19	3	9	nw.	C. A. Suter, Jr
Romney	Hampshire	824	17	57.7[f]	+3.1	84[f]	21	25[a]	25	49[f]	3.94	+1.53	3.17	0	4	14	14	3		Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	57.0	+1.9	85	3	23	11	46	3.05	+0.77	3.05	0	1	24	3	4	w.	J. M. Mallow
Averages and	Extremes			55.2	+2.0	85	3	20	24†	50	3.55	+1.02	3.17	T.	5	18	7	6	w.	
Northern Division.																				
Bens Run	Pleasants	622	13	58.1	+1.8	80	4†	30	10	42	1.39	-1.59	0.66	0	7	21	8	2		J. D. Riggs
Brandonville	Preston	1,809	1								3.71		1.81	0	5					W. T. Miller
Buckhannon	Upshur	1,411	24	55.2[j]	+2.2	78[j]	4†	23[j]	10	40[j]	3.75	+0.37	2.40	T.	6	18	5	8		H. A. Darnall
Cairo	Ritchie	674	12	57.4	−0.1	82	19	27	10	43	4.52	+1.47	2.75	0	6	16	11	4		Van A. Zevely
Central Station	Doddridge	950	12																	G. W. Sherwood
Cortland	Tucker	3,300	1								4.48		1.70	0	6					Samuel Harmon
Creston	Wirt	701	13	59.6	+4.6	89	14	27	10	46	5.33	+2.73	3.52	0	6	17	4	10	sw.	J. M. Reed
Davis	Tucker	3,093	7								4.63		1.80	T.	10	18	2	11		Ross C. Male
Elizabeth	Wirt	646	4								3.75		2.15	0	5					E. D. Ball
Elkins	Randolph	1,940	15	54.2	+2.8	81	4	24	10	45	4.42	+2.00	2.20	T.	8	9	9	13	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	56.2	+1.2	85	4†	28	10†	52	3.69	+1.15	1.64	0	9	22	4	5	w.	F. P. Hall
Glenville	Gilmer	738	25	57.0	+1.8	85	24†	22	31	56	4.12	+1.26	2.90	0	5	19	6	6	s.	M. T. Brannon
Grafton	Taylor	1,000	22	58.7	+3.0	83	4†	28	10†	49	4.27	+1.51	2.07	0	9	17	2	12	s.	Joseph Gerken
Lost Creek	Harrison	1,026	18	56.1	+1.5	84	15	21	10	48	3.54	+1.10	2.20	0	9	21	6	4	w.	Allen Smith
Mannington	Marion	974	12	55.4	+1.6	81	18	25	10	48	4.71	+2.20	2.50	0	9	15	7	9	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	55.6[e]	+0.5	80[b]	4	28[c]	24	40[e]	4.39	+1.30	1.38	0	7				w.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	58.4	+2.8	84	5	27	26	42	2.48	−0.46	1.37	0	4	15	10	6	sw.	M. Z. White
New Cumberland	Hancock	987	15	54.4	+0.1	81	4	21	24†	56	1.93	−0.82	1.00	0	6	11	17	3	sw.	M. F. Smith
New Martinsville	Wetzel	634	21	58.4	+1.7	83	18	28	10	47	3.57	+1.03	1.80	0	6	22	6	3	s.	Wm. Ankrom
Parkersburg	Wood	638	26	57.8	+3.2	80	4	28	10	38	2.64	+0.20	0.54	0	6	16	10	5	se.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	55.0	+2.3	79	16†	26	12†	45	3.05	+2.21		T.	5	19	8	4		J. W. Swisher
Philippi	Barbour	1,149	22	58.0	+3.9	86	5	25	10	41	2.80	−0.08	1.42	T.	12	13	12	6	w.	Okey J. Robinson
Pickens	Randolph	2,697	24	55.5	+4.7	85	16	23	10	50	4.43	+1.66	1.97	T.	6	22	3	6	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29								4.18	+1.37	1.42	0	12				w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7								2.45		2.25	0	4					J. O. Goodman
Smithfield	Wetzel	835	10	56.1		87	4	27	10	46	5.56	+2.28	2.75	T	8	17	10	4	nw.	G. M. Whisler
Terra Alta	Preston	2,612	14	51.9	+0.2	70	4†	20	24	42	3.70	−0.19	0.82	T.	8	19	4	8	w.	H. C. Shaffer
Wellsburg	Brooke	1,225	20	54.8	+1.3	76	4	28	9	34	2.82	+0.38	1.36	T.	5	17	8	6	w.	C. P. Waugh
Weston	Lewis	1,026	26	54.4[d]	−0.5	80[d]	14	28[d]	10	42[d]	2.66	0.37	1.60	0	5	15[d]	5[d]	7[d]	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	55.9[i]		85	4	29[b]	10†	50[b]	2.67	−0.37	1.17	0	6	19	5	7	sw.	Miss M. B. Forsyth
Averages and	Extremes			56.3	+2.0	89	14	20	24	56	3.66	+0.84	3.52	T.	7	17	7	7	w.	
Southern Division.																				
Bancroft	Putnam	574	11	57.3	-0.4	82	18	30	10†	46	4.54	+1.70	2.90	0	7	20	1	10	ne.	R. E. Dent
Beckley *	Raleigh	2,440	15	57.4	+3.2	81	6†	26	10	47	2.26	−0.16	.80	0	4	23	4	4	w.	John A. Ewart
Bluefield *	Mercer	2,558	20	57.3	+1.9	80[b]	16	25[b]	10	44[b]	1.98	−0.80	1.20	0	4	16	5[b]	8		Norfolk & Western Ry.
Charleston	Kanawha	597	29	59.6	+1.2	87	4	34	10†	42	4.35	+1.74	2.30	0	7				w.	C. V. Lewis
Clay	Clay	706	0																	Prof. E. H. Knabenshue
Cuba *	Jackson	650	14	57.0	+2.0	81	13†	25	10	46	4.87	+2.10	3.68	0	5	16	12	3	nw.	C. T. Perry
Dam 22 O. R.	Jackson	538									4.97		3.25	0	5					U. S. Engineer Office
Dunlow	Wayne	703	7	61.0		86	18	29	10	50	3.66		2.14	0	4	18	7	6	w.	George Damron
Elkhorn	McDowell	1,933	22	58.4	+2.7	81	16	27	10	38	1.76	−0.84	1.02	0	7	15	10	6	w.	J. J. Lincoln
Evans	Jackson	606	0								5.08		3.71	0	5	20	2	9		B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	56.7	+2.2	82	15	25	10	47	3.60	+1.72	1.90	0	7	18	7	6	e.	W. H. Gwinn
Hinton	do	1,450	25	58.8	+2.3	85	16†	31	10†	45	3.85	+1.49	3.21	0	7	14	2	15	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	56.0		85	16	27	10†	47	4.00			0	7	19	4	8		R. E. Ferguson
Huntington	Cabell	538	19	56.8	+0.7	77	14†	31	10	37	4.02	+1.78	2.54	0	6	17	5	9		L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	55.4	+2.1	79	16	24	10	41	4.66	+1.89	3.58	T.	4	13	10	8	nw.	Geo. T. Argabrite
Logan	Logan	687	12																	W. H. Oliver, Jr
Madison	Boone	704	9																	S. E. Bradley
Marlinton	Pocahontas	2,131	18	51.3	+0.7	74	15	20	10	40	4.17	+1.66	3.53	T.	7	11	17	3	nw.	S. L. Brown
Nuttallburg	Fayette	2,252	22	52.8		70	15†	26	10	30	0.74	−1.76	0.34	0	3	17	5	2		Miss Donna Tully
Point Pleasant	Mason	553	24	58.4	+1.0	83	4	27	10	47	4.77	+2.35	4.12	0	6	17	6	8	sw.	W. D. Holmes
Powellton	Fayette	933	17	60.8[b]	+4.7	85[b]	4	28[b]	10	44[b]	3.57	+1.44	2.60	0	4	14	13	4		S. C. Lampert
Robertsburg	Putnam	574	14	56.8	−0.4	84	4†	26	10	50	4.83	+2.39	3.75	0	5	14	4	13		E. C. Brace
Ryan	Roane	709	11	57.4	+3.2	84	18	25	10	47	4.78	+1.67	2.70	0	8	21	3	7		Wm. E. Ryan
Spencer	do	784	16	55.8		84	14	24	9	47	5.55	+2.68	3.25	0	5	8	17	6		A. M. McKown
Sutton	Braxton	839	11	60.2		88	4	31	10†	51	5.20	+2.30	3.30	0	6	20	3	2		Ben Gillespie
Union	Monroe	2,250	10	59.2[a]		85[a]	16	24	10	45[a]	2.70	−0.09	2.00	0	3					J. C. Shanklin
White Sulphur Springs	Greenbrier	1,940	5	55.4		78	15	24	10	43	3.28		2.25	0	6	24	2	5	sw.	J. M. Ayres
Williamson	Mingo	660	13	61.4	+3.2	89	14	31	9	42	3.82	+1.39	2.80	0	6	16	7	8	w.	J. F. Keyser
Averages and	Extremes			57.5	+1.8	89	14	20	10	51	4.01	+1.38	4.12	T.	6	17	7	7	w.	
State Averages and	Extremes			56.6	+1.9	89	14	20	10†	56	4.11	+1.06	4.12	T.	6	17	7	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for October, 1915.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac	1.50	.30	..	..	..	..	.50	..	.07	T.	..	..	..	T.	..	..	T.	..	1.13	.19	..	..	..	..	..	T.	..	..	..	..	..	3.69
Burlington	do	2.70	..	..	..	.25	..	..	..	..	..	..	..	..	..	T.	..	..	*	1.25	..	..	..	..	..	..	..	..	..	..	T.	..	..	4.20
Franklin	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Harpers Ferry	do	1.55	.61	..	..	.26	..	..	.05	..	..	..	..	..	T.	..	..	..	T.	..	.94	.05	..	..	..	..	..	..	.28	..	..	..	..	3.74
Lost City	do	2.70	..	..	..	..	..	..	..	..	..	..	..	..	..	•	..	..	..	.10	.25	..	..	..	..	..	.03	..	..	..	..	..	..	3.08
Martinsburg	do	2.41	..	..	..	.26	..	.07	..	..	..	..	..	..	..	T.	..	..	..	..	.33	..	..	..	..	..	.05	..	..	.04	..	..	..	3.16
Moorefield	do	2.51	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.20	.14	.22	..	..	..	..	..	.08	..	.02	..	..	..	..	3.17
Piedmont	do	2.94	.06	..	..	.05	..	..	..	..	..	..	..	..	..	..	..	..	.21	.46	.09	..	..	..	..	..	.01	..	..	.08	..	..	..	3.90
Romney	do	3.17	..	..	..	.35	..	..	..	..	..	..	..	..	..	..	..	T.	..	..	.35	..	..	..	..	..	.07	..	..	..	..	..	..	3.94
Upper Tract	..	3.05	T.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	T.	..	..	..	..	..	..	T.	..	..	..	..	..	..	3.05
Northern Division.																																	
Glens Run	Ohio	.02	.13	..	..	.66	..	..	..	..	..	..	..	..	..	.10	..	..	.20	.26	..	..	..	..	..	..	.02	..	..	..	..	..	..	1.39
Grandonville	Monongahela	1.81	.31	..	..	.18	..	..	..	..	..	..	..	..	..	..	..	..	..	.73	..	..	..	..	..	..	..	..	..	.68	..	..	..	3.71
Buckhannon	do	2.40	.15	..	T.	.40	..	..	..	9	..	..	..	..	..	..	..	..	T.	.35	.10	..	..	T	..	..	.35	..	..	..	..	..	..	3.75
Cairo	Little Kanawha	2.75	.24	..	..	.27	..	..	..	T.	..	..	..	..	..	..	..	..	..	.78	.03	..	..	..	..	..	.45	..	..	..	..	..	..	4.52
Central Station	Middle Is. Creek	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cortland	Monongahela	1.26	..	.73	.28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1.70	..	..	..	..	..	..	..	..	.18	.33	..	..	..	4.48
Creston	Little Kanawha	3.52	.32	..	..	.05	..	..	..	..	T.	..	..	..	..	..	..	..	..	1.13	.21	..	..	..	..	..	.10	..	..	..	..	..	..	5.33
Davis	Monongahela	1.80	.53	.06	..	.35	.01	..	..	T.	T.	..	..	..	..	T.	..	..	..	1.47	.25	.02	..	..	..	..	..	.08	..	.06	..	..	..	4.63
Elizabeth	Little Kanawha	2.15	..	.12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1.15	.22	..	..	..	..	..	.11	..	..	..	..	..	..	3.75
Elkins ***	Monongahela	2.00	.11	..	T.	.21	..	..	T.	.06	..	..	..	..	T.	..	..	..	..	1.50	.22	02	..	..	..	..	.30	..	..	T.	..	..	..	4.42
Fairmont	do	1.64	.41	..	..	.12	..	..	..	T.	.04	..	..	..	..	.06	..	..	..	1.02	.09	..	..	..	..	..	.21	..	..	.10	..	..	..	3.69
Glenville	Little Kanawha	2.90	..	..	..	.50	..	..	..	..	..	..	..	..	..	..	..	..	..	.52	10	..	..	..	..	..	.10	..	..	..	..	..	..	4.12
Grafton	Monongahela	2.07	.42	..	.57	.29	..	..	..	..	..	..	..	..	..	..	.04	..	..	.12	.50	.10	..	..	..	..	..	.16	..	..	..	..	..	4.27
Lost Creek	do	2.20	.09	..	.05	.07	..	..	..	.03	..	..	..	..	T.	..	..	..	..	.21	.60	.05	..	..	..	..	.18	..	..	T.	..	..	..	3.54
Mannington	do	2.50	.14	..	..	.15	..	..	.01	.06	..	..	..	..	..	..	..	..	..	.47	.91	..	..	..	..	..	.35	..	..	.12	..	..	..	4.71
Morgantown	do	1.20	1.38	..	.01	.23	..	..	..	..	..	..	..	..	..	..	..	..	.31	1.03	..	..	..	..	..	.25	..	..	..	..	..	..	..	4.39
Moundsville	Ohio	1.37	..	..	..	..	.36	..	..	..	..	..	..	..	..	..	..	..	..	.63	..	..	..	..	..	..	..	..	..	.12	..	..	..	2.48
New Cumberland	do	1.00	.07	..	..	.35	..	..	T.	..	..	..	..	..	T	.29	T.	..	T.	.12	..	..	..	..	..	..	..	..	..	..	T.	.10	..	1.93
New Martinsville	do	1.80	.12	..	..	1.8	..	..	..	..	..	..	..	..	..	..	..	..	..	.15	.32	..	..	..	..	..	..	..	..	..	.10	..	..	3.57
Parkersburg ***	Ohio	1.78	..	.03	.01	.27	..	..	T.	T.	..	..	..	..	..	..	..	..	.17	.38	..	..	..	..	..	..	T.	..	T.	..	..	..	..	2.64
Parsons	Monongahela	*	1.25	..	..	..	.80	..	..	..	.30	..	..	..	T	T	..	..	..	T.	.70	..	..	..	..	..	..	..	..	..	..	..	..	3.05
Philippi	do	1.42	.11	..	.07	.37	..	..	..	.10	*	..	..	..	.01	..	..	..	*	.32	.52	..	..	..	..	..	.01	..	..	.07	..	..	..	2.80
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pickens	do	1.97	.62	..	..	.44	..	..	T.	T	..	..	..	..	..	..	..	..	.34	.76	T.	..	..	..	..	.30	..	..	..	..	T.	..	..	4.43
Rowlesburg	do	1.42	1.22	.06	..	.42	.04	..	..	..	.08	..	..	..	..	•	..	..	..	.26	.24	.14	..	..	..	..	..	.06	..	.12	..	..	..	4.18
Saint Marys	Ohio	2.25	..	.10	..	.10	..	..	..	..	..	..	..	..	T.	..	..	..	..	.51	..	..	..	..	..	..	..	..	..	..	..	..	..	3.46
Smithfield	Fishing Creek	2.50	.45	..	..	.06	..	..	T.	.05	..	..	..	..	..	..	..	..	..	1.04	.61	..	..	..	..	..	.47	..	..	.08	..	..	..	5.36
Terra Alta	Monongahela	.65	.30	..	T.	.12	..	..	..	T	..	..	.50	..	..	..	..	..	..	.82	.28	.48	..	..	..	..	..	.15	..	..	..	..	..	3.30
Wellsburg	Ohio	1.36	.04	..	..	.66	..	..	T.	..	..	..	..	..	..	.44	..	..	..	.32	..	..	..	..	..	..	T.	..	..	..	..	..	..	2.82
Weston	Monongahela	1.00	.50	..	..	.40	..	..	..	..	.06	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.10	..	..	..	..	2.06
Wheeling	Ohio	1.17	.50	..	..	.70	..	..	..	..	T.	..	..	..	..	.10	T.	T.	..	.32	..	..	..	..	..	..	..	..	T.	.08	..	..	..	2.67
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Southern Division.																																	
Bancroft	Great Kanawha	2.90	.10	..	.06	.43	..	..	..	..	..	..	..	..	..	..	..	..	..	.89	.10	..	..	..	..	..	.06	..	..	..	..	..	..	4.54
Beckley	do	.75	..	..	..	.21	..	..	..	..	..	..	..	..	..	..	..	..	..	.50	..	..	..	..	..	.80	..	..	..	..	..	..	..	2.26
Bluefield	do	.20	..	..	..	.28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.30	..	..	..	..	..	..	.20	..	..	..	..	..	1.98
Charleston	do	2.30	.10	..	..	.35	..	..	..	..	..	..	..	..	..	.2	T.	..	..	.90	.35	..	..	..	..	..	..	.10	..	..	..	..	..	4.35
Clay	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cuba	Sand Creek	3.68	..	..	..	.30	..	..	..	..	..	..	..	..	..	..	..	..	.25	.38	..	..	..	..	..	..	.26	..	..	..	..	..	..	4.87
Dam 22 O. R	Ohio	3.25	.17	..	..	.49	..	..	..	..	..	..	..	..	..	..	..	..	..	.86	..	..	..	..	..	..	.20	..	..	..	..	..	..	4.97
Dunlow	Big Sandy	2.14	..	..	..	.64	..	..	..	..	..	..	..	..	..	..	..	..	.75	..	..	..	..	..	..	.15	..	..	..	..	..	..	..	3.66
Elkhorn	do	1.02	.18	..	.23	..	..	..	..	..	..	..	..	..	.01	..	..	..	..	.11	.10	..	..	..	..	..	..	.11	..	..	..	..	..	1.76
Evans	Ohio	4.71	..	..	..	..	..	.10	..	..	..	..	..	..	..	..	..	..	.82	.35	..	..	..	..	..	..	.10	..	..	..	..	..	..	5.08
Green Sulphur Spgs.	Great Kanawha	.90	.10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.70	.30	.10	..	..	..	..	..	.30	.20	..	..	..	..	..	3.60
Hinton	do	2.15	.06	..	..	.20	..	..	..	..	..	..	..	..	.02	..	..	..	..	.16	.10	..	..	..	..	..	..	.16	..	..	..	..	..	3.85
Holcomb	do	*	2.10	..	..	.42	..	..	..	..	..	..	..	..	T.	..	..	..	*	*	1.30	..	..	..	..	..	.12	..	..	..	..	..	..	4.00
Huntington	Ohio	2.48	.08	..	..	.28	..	..	..	..	..	..	..	..	..	..	..	..	..	1.00	.08	..	..	..	..	..	.12	..	..	..	..	..	..	4.02
Lewisburg	Great Kanawha	3.58	..	..	..	.26	..	T.	..	T.	..	..	..	..	T.	..	..	..	.51	.31	..	..	..	..	..	..	T.	..	..	..	..	..	..	4.66
Logan	Guyandotte	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madison	Great Kanawha	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marlinton	do	3.53	..	..	..	.27	..	..	..	T.	..	..	..	..	.03	..	..	..	.09	.06	1.	..	..	..	..	..	.36	..	..	..	..	..	..	4.47
Nuttallburg	do	.20	T.	..	T.	.20	..	..	..	..	..	..	..	..	T.	..	..	..	T.	..	..	..	..	..	..	..	.34	..	..	..	..	..	..	0.74
Point Pleasant	Ohio	4.02	.10	..	..	.06	..	..	..	..	..	..	..	..	..	..	..	..	..	.50	.04	..	..	..	..	..	.06	..	..	..	..	..	..	4.77
Powellton	Great Kanawha	2.60	..	..	..	..	..	..	..	..	.35	..	..	..	..	..	..	..	..	..	.55	..	..	..	..	..	.07	..	..	..	..	..	..	3.57
Robertsburg	do	3.75	.07	..	..	.05	..	..	..	..	..	..	..	..	..	..	..	..	..	.90	.06	..	..	..	..	..	..	..	..	..	..	..	..	4.83
Ryan	do	2.70	.06	..	.05	.58	..	..	..	T.	..	..	..	..	..	..	..	T.	.27	1.02	.02	..	..	..	..	..	.08	..	..	..	..	..	..	4.78
..	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Spencer	Little Kanawha	3.25	.15	..	..	.35	..	..	..	..	..	..	..	..	..	..	..	..	..	1.65	.15	..	..	..	..	..	..	..	T.	..	..	..	..	5.55
Sutton	Great Kanawha	3.30	.12	..	..	69	..	..	..	..	..	..	..	..	T.	..	..	..	..	.61	.10	..	..	..	..	..	7	.38	..	..	..	..	..	5.20
Union	do	2.00	T.	..	..	.30	..	T.	..	..	..	..	..	..	..	..	..	..	..	..	.40	..	..	..	..	..	T.	..	..	..	..	..	..	2.70
White Sulphur Spgs.	do	2.25	..	..	..	.50	..	..	..	..	..	..	..	..	.08	..	..	..	17	.04	.24	..	..	..	..	..	..	..	..	..	..	..	..	3.28
Williamson	Big Sandy	2.80	.06	..	..	.34	.02	..	..	.01	..	..	..	..	..	..	..	..	..	.25	.35	..	..	..	..	..	..	..	..	..	..	..	..	3.82

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‡‡‡ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

‡‡‡ Probably incomplete.

Daily Temperatures for October, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Division.																																	
Bayard	Maximum	55	55	67	..	..	..	76	59	43	54	70	70	73	70	76	73	77	74	66	66	69	65	56	52	70	70	59	65	63	56	..	64.8
	Minimum	46	49	37	..	..	..	35	38	32	22	23	26	29	48	43	52	45	40	51	54	40	31	42	20	20	35	34	24	..	..	37	36.7
Burlington	Maximum	58	64	71	75	70	62	58	56	53	54	67	72	74	75	79	68	66	76	73	72	77	69	60	58	63	74	65	68	71	70	69	67.3
	Minimum	48	49	44	48	55	45	45	40	33	26	27	30	36	51	50	55	58	58	57	58	50	40	40	27	25	35	37	29	36	38	30	41.9
Martinsburg§	Maximum	55	66	73	80	70	65	56	61	53	59	68	72	76	76	83	64	65	68	76	72	79	72	63	60	65	73	70	68	75	63	68	68.2
	Minimum	40	50	45	47	52	51	44	49	38	36	32	35	38	43	58	59	59	56	60	60	58	47	47	33	31	32	42	36	37	46	35	45.0
Piedmont	Maximum	60	65	74	77	67	62	58	57	47	59	68	74	77	73	78	69	68	76	71	70	74	67	58	57	62	74	64	70	69	58	70	66.9
	Minimum	50	53	48	54	60	48	43	45	38	31	28	32	38	48	55	58	59	61	60	61	52	43	48	30	28	39	40	32	40	50	32	45.3
Romney	Maximum	72	66	77	81	77	67	63	..	58	64	70	79	81	80	..	..	70	82	..	80	84	..	67	58	65	..	72	73	77	72	73	72.3
	Minimum	47	50	40	49	60	47	55	50	35	28	27	30	36	50	55	57	58	56	..	53	50	39	50	27	25	40	37	29	32	50	30	43.1
Upper Tract	Maximum	61	80	85	80	72	65	63	63	56	50	58	74	76	75	79	75	80	81	73	73	76	69	66	62	70	77	68	73	72	67	69	70.6
	Minimum	49	40	40	48	61	48	49	48	45	25	23	28	40	51	52	54	54	55	61	57	51	40	42	26	25	46	40	30	40	50	29	43.5
Northern Division.																																	
Bens Run	Maximum	63	70	78	80	74	66	69	56	49	60	73	74	79	78	80	72	79	80	66	76	77	70	67	61	78	66	66	74	67	65	74	70.5
	Minimum	56	54	49	53	52	46	42	37	36	30	35	38	55	55	57	56	54	52	59	57	51	42	40	33	36	47	38	35	45	42	35	45.7
Buckhannon	Maximum	66	63	71	78	70	60	64	54	45	52	55	68	78	78	78	73	77	78	70	58	72	..	..	..	..	..	..	..	..	..	..	67.0
	Minimum	53	46	40	45	51	44	36	40	33	23	28	30	38	51	50	55	47	44	53	55	50	..	..	..	..	..	..	..	..	..	..	43.4
Creston	Maximum	65	71	80	84	74	70	75	68	52	62	76	79	83	89	86	74	74	86	67	79	86	79	76	72	80	77	81	77	79	66	72	75.5
	Minimum	59	52	46	51	54	46	40	35	34	27	31	33	43	55	54	56	51	50	60	57	48	43	36	36	35	49	38	32	36	36	30	43.6
Elkins	Maximum	60	60	72	81	68	63	66	51	40	55	73	72	76	74	79	77	80	79	69	68	73	64	60	57	76	72	63	68	68	56	72	67.5
	Minimum	54	46	44	47	50	43	40	36	28	24	28	30	38	53	50	54	51	48	58	51	48	39	33	30	27	50	35	29	39	39	28	41.0
Fairmont§	Maximum	62	70	78	85	67	70	69	59	48	60	77	77	85	74	82	74	81	85	68	74	80	71	64	62	78	70	68	73	70	64	72	71.5
	Minimum	45	52	45	47	48	46	40	37	34	28	30	32	33	41	53	56	51	48	50	59	49	42	37	28	31	33	37	31	32	41	30	40.8
Glenville	Maximum	72	70	80	85	80	70	71	69	50	60	76	77	83	79	85	80	80	85	73	76	81	79	72	64	81	76	70	75	74	71	75	74.8
	Minimum	58	55	48	50	47	46	41	37	33	28	31	34	42	46	46	49	46	43	51	52	42	37	36	27	25	25	30	25	35	27	22	39.2
Grafton	Maximum	66	66	68	83	70	65	68	62	62	58	75	77	82	76	78	81	83	81	82	74	78	80	73	68	80	69	75	74	76	70	64	73.0
	Minimum	53	54	56	47	52	45	42	39	36	28	30	34	41	52	54	56	53	50	53	60	52	41	37	28	31	39	49	46	44	42	31	44.4
Lost Creek	Maximum	67	66	78	83	73	66	68	58	46	45	70	76	83	76	84	78	80	81	68	74	78	71	65	61	77	73	66	73	69	64	72	70.6
	Minimum	55	55	41	45	57	45	37	36	33	21	27	31	39	51	54	49	50	46	56	58	46	39	33	27	29	54	40	28	42	38	28	41.6
Mannington	Maximum	65	65	73	80	71	62	66	62	46	54	71	72	80	75	79	72	76	81	67	74	78	69	63	60	77	71	66	71	69	63	70	69.3
	Minimum	53	54	44	47	54	45	38	34	33	25	29	31	39	51	52	57	50	47	59	58	48	37	35	26	29	46	33	30	40	35	29	41.5
Morgantown	Maximum	62	63	..	80	72	63	65	60	46	..	72	64	71	70	69	69	66	63	64	66	66	66	56	52	69	68	60	61	61	58	60	64.2
	Minimum	51	53	..	40	54	44	45	39	36	..	..	41	53	66	59	56	51	51	58	59	51	40	40	28	33	55	47	36	51	43	36	47.0
New Cumberland	Maximum	60	63	76	81	75	61	70	58	46	57	73	72	80	75	68	69	69	77	73	76	71	68	59	60	77	71	64	73	66	64	70	68.5
	Minimum	49	52	41	48	49	40	36	34	34	29	29	32	40	56	57	51	40	46	54	51	45	31	38	21	21	47	32	31	45	41	29	40.3
New Martinsville	Maximum	62	60	70	82	78	69	74	66	48	62	76	74	81	80	76	74	80	83	71	79	80	73	66	63	81	70	69	76	74	69	77	72.4
	Minimum	55	55	47	52	52	45	42	35	35	28	32	36	43	54	55	56	49	52	58	56	50	43	49	30	34	50	35	36	43	38	32	44.4
Parkersburg	Maximum	64	67	78	80	70	62	69	54	48	55	71	70	78	80	74	68	76	79	67	74	73	64	64	57	79	68	65	74	67	61	70	68.5
	Minimum	58	53	48	58	50	47	40	40	35	28	37	41	51	62	59	54	50	53	58	55	52	44	40	38	40	54	44	37	52	42	37	47.0
Parsons	Maximum	58	60	69	76	70	68	62	65	53	42	52	65	71	76	78	79	74	77	79	67	68	70	65	68	74	75	63	68	69	58	71	67.4
	Minimum	50	52	46	49	53	50	45	39	33	30	27	26	29	35	38	50	47	52	50	56	55	58	55	57	45	35	35	27	35	40	26	42.7
Philippi	Maximum	64	65	73	73	86	65	70	64	57	55	74	75	84	75	82	72	77	80	69	71	75	65	61	55	74	74	63	69	69	69	70	70.2
	Minimum	54	54	43	46	55	46	40	40	36	25	36	40	49	59	57	57	52	55	60	59	51	40	38	27	33	56	46	35	48	44	36	45.7
Pickens	Maximum	62	58	70	80	65	65	75	65	72	55	75	73	75	72	73	85	78	80	67	65	67	66	62	62	80	70	76	75	80	76	80	71.1
	Minimum	54	46	43	53	48	43	42	34	32	23	32	36	50	51	50	52	49	51	55	52	41	38	34	37	33	40	34	43	30	43	30	41.9
Terra Alta	Maximum	68	63	64	70	69	66	65	62	58	64	65	63	66	66	64	70	67	65	66	70	68	68	67	62	66	68	65	66	65	68	65	65.8
	Minimum	46	49	42	40	50	48	38	36	32	26	28	38	40	40	42	45	40	40	38	40	38	35	38	29	32	35	38	36	32	36	40	38.0
Wellsburg	Maximum	60	60	70	76	69	58	63	57	52	65	66	67	74	72	64	61	69	74	66	70	65	62	53	53	70	61	58	66	61	58	64	64.0
	Minimum	51	53	46	54	50	44	39	37	28	37	44	45	50	58	57	52	43	53	56	53	54	40	44	30	36	48	43	38	48	42	36	45.5
Weston§	Maximum	78	76	70	74	78	64	66	54	46	44	72	..	72	80	..	..	..	68	78	76	72	68	66	58	66	70	68	72	70	72	74	68.6
	Minimum	50	44	42	40	44	48	42	38	34	28	30	32	..	42	48	..	..	..	58	54	44	42	46	34	32	34	38	36	32	36	34	40.1
Wheeling§	Maximum	61	68	81	85	61	67	74	60	50	62	76	76	81	82	71	67	75	81	70	80	76	73	68	62	80	70	68	76	70	68	70	71.3
	Minimum	43	54	47	47	53	42	41	35	37	29	29	36	37	45	45	55	47	48	..	..	52	40	39	29	30	35	37	35	38	39	30	40.5
Southern Division.																																	
Beckley	Maximum	74	74	79	79	74	81	73	70	74	55	72	74	76	78	81	78	71	78	77	79	69	70	71	69	72	78	69	73	74	74	76	73.9
	Minimum	59	54	53	50	50	48	44	40	32	26	29	32	34	31	40	42	50	56	37	51	50	36	34	34	38	49	34	32	32	29	40	40.8
Bluefield	Maximum	70	66	72	79	69	67	68	59	46	52	70	74	69	70	79	80	..	79	..	65	73	69	67	60	73	71	66	70	70	64	70	68.5
	Minimum	50	53	45	45	55	50	52	40	32	25	26	47	56	60	52	52	..	55	..	56	56	45	38	45	41	54	46	36	46	45	33	46.1
Charleston	Maximum	69	74	79	87	76	75	69	64	58	57	70	75	79	80	80	73	72	81	72	75	77	77	66	69	78	75	69	74	75	70	78	73.3
	Minimum	54	57	51	54	55	49	47	41	35	34	34	35	37	50	52	52	55	53	54	60	54	49	42	42	40	40	49	35	35	38	37	45.8
Elkhorn	Maximum	67	65	60	80	77	67	66	62	48	59	72	74	73	73	78	81	78	79	79	64	64	60	66	66	74	72	70	67	69	67	70	69.3
	Minimum	53	55	47	53	56	50	55	42	36	27	37	38	52	62	55	54	53	56	60	58	55	48	38	43	43	48	46	37	42	40	32	47.5
Green Sulphur Spgs.	Maximum	63	70	75	81	73	72	67	58	50	59	72	75	76	72	82	81	80	79	70	67	77	72	67	71	75	75	69	72	74	62	74	71.3
	Minimum	57	50	45	45	45	48	48	38	31	25	26	28	41	41	58	51	53	56	58	55	54	44	32	30	32	38	46	29	34	38	30	42.1
Hinton§	Maximum	64	73	80	81	64	70	71	63	45	63	73	76	74	71	83	85	85	84	70	69	78	73	71	69	77	76	70	74	76	65	72	72.4
	Minimum	52	55	49	49	53	51	51	42	34	31	32	33	35	45	56	56	57	57	57	58	56	50	39	40	36	37	44	37	38	40	31	45.2
Holcomb§	Maximum	66	66	76	83	80	68	65	54	55	61	76	77	75	76	79	85	78	79	71	70	78	72	65	64	68	74	66	72	71	59	74	71.1
	Minimum	50	52	42	45	48	46	44	40	29	27	29	30	37	57	47	50	51	47	55	55	45	44	32	35	32	38	40	30	35	32	27	41.0
Huntington§	Maximum	66	69	75	75	62	62	66	55	50	55	67	70	74	77	65	68	66	77	68	71	73	66	68	61	74	68	67	70	69	61	71	67.3
	Minimum	51	57	51	53	55	49	45	40	39	31	35	36	40	52	60	54	55	54	57	58	53	46	41	42	41	42	43	36	40	43	34	46.2
Lewisburg	Maximum	60	64	72	76	70	61	65	59	44	54	66	69	70	69	76	79	77	72	70	70	73	68	64	64	73	73	66	70	69	63	68	67.5
	Minimum	58	54	44	46	56	49	49	40	32	24	29	31	43	55	50	48	52	52	54	56	51	42	36	42	32	39	41	30	35	44	27	43.3
Madison§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Marlinton	Maximum	54	58	66	70	66	67	58	52	39	52	62	64	64	65	74	73	72	70	64	64	66	68	58	59	66	68	59	62	60	50	60	62.3
	Minimum	50	48	40	46	48	46	44	36	28	20	24	28	38	52	54	50	52	54	58	54	50	44	30	38	26	35	42	26	32	34	23	40.3
Point Pleasant	Maximum	67	74	82	83	73	68	73	59	52	60	75	77	80	82	82	70	73	82	69	78	78	71	73	65	81	72	71	78	72	67	75	73.0
	Minimum	56	54	48	55	51	43	39	33	34	27	32	34	46	55	56	55	48	50	58	53	48	40	37	38	35	54	36	31	45	38	30	43.8
Powellton	Maximum	70	70	..	85	73	66	68	..	61	65	72	75	78	79	83	74	79	82	69	73	77	70	71	73	72	79	70	78	79	65	75	73.5
	Minimum	57	56	..	48	55	50	47	..	34	28	31	32	48	61	54	63	63	54	59	58	53	54	38	49	55	53	43	34	44	40	32	48.0
Robertsburg§	Maximum	65	74	83	84	65	69	70	55	50	60	75	76	79	84	82	68	75	82	69	77	79	69	69	63	80	68	70	75	70	65	75	71.8
	Minimum	48	55	49	51	52	42	39	32	31	26	30	33	39	51	51	55	51	49	58	54	50	41	37	33	30	39	37	32	38	35	30	41.9
Ryan	Maximum	70	73	78	82	75	67	68	56	50	58	72	74	78	79	80	79	72	84	68	76	80	80	72	65	79	75	70	74	73	73	73	72.7
	Minimum	50	50	56	49	55	45	41	31	28	25	28	30	40	54	52	51	50	58	58	58	46	38	32	39	39	48	34	28	39	28	26	42.1
Spencer§	Maximum	64	66	72	81	64	65	64	48	50	74	75	80	80	84	84	80	70	76	83	68	76	80	70	69	68	72	77	72	76	76	70	64	71.4
	Minimum	46	57	44	49	54	44	39	33	24	30	35	37	40	52	54	52	51	51	56	58	46	42	33	35	34	52	35	29	35	28	28	42.1
Union§	Maximum	66	73	79	80	64	67	66	62	52	65	74	77	74	82	80	85	84	82	73	70	78	70	72	76	77	76	70	74	75	76	..	73.6
	Minimum	50	54	42	48	54	50	50	41	31	24	30	32	45	59	48	47	51	51	54	56	53	42	53	54	35	33	43	30	35	46	45	44.7
White Sulphur Spgs.	Maximum	60	59	72	76	70	62	61	57	47	56	66	70	69	69	78	76	77	75	71	69	71	75	66	65	72	73	67	69	71	64	69	67.8
	Minimum	51	44	43	49	56	50	50	41	32	24	27	28	40	58	54	54	51	54	55	57	54	42	33	38	30	37	45	29	33	45	26	42.9
Williamson§	Maximum	70	73	80	84	60	70	69	61	50	61	73	73	80	89	83	71	82	84	68	75	78	73	72	69	81	78	73	75	79	67	77	73.5
	Minimum	57	59	56	59	58	52	52	42	31	36	37	38	41	53	59	59	62	58	59	61	58	54	43	43	44	44	50	42	47	39	35	49.3

§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


No Rain
No Rain
No Rain
No Rain
Trace
Trace
Trace
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

WVE Slack

DEC 30

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

NOVEMBER, 1915

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
DECEMBER 20, 1915

Departure of the Mean Temperature from the Normal, November, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIII. PARKERSBURG, W. VA., NOVEMBER, 1915. NO. 11.

GENERAL SUMMARY.

November was considerable warmer and wetter than usual and exceptionally sunshiny, with light and unimportant snowfall in most sections. The month was warmer in 1896, 1899, 1900, 1902, and 1909 only, for period of record, and more sunshine was received than during any other November of record, except in 1914. The conditions were exceptionally favorable for grazing and outdoor work.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.08 and 30.10 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.46 inches on the 10th, and 29 33 inches on the 19th. Elkins, 30.49 inches on the 10th, and 29.29 inches on the 19th.

TEMPERATURE.

The monthly mean for the State, 48 stations reporting, was 45.2°. The mean departure from the normal for 40 stations having ten or more years of record was + 2.7°. Except the 3d, the temperatures were generally considerably above the normal until the 13th, with the highest readings of the month at many stations on the 1st and 11th, and in a few sections on the 7th and 8th. Seasonally cool weather prevailed from the 13th to the 18th, 22d to the 24th, and on the 29th and 30th, with the lowest readings of the month occurring in most sections on the 16th, 17th, 23d, and 30th. Abnormally warm weather prevailed from the 25th to the 28th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 75 per cent; 8 p. m., 67 per cent. The November averages for the same hours for the past 27 years are 81 and 71 per cent, respectively. Elkins, 8 a. m., 80 per cent; 8 p. m., 67 per cent. The November averages for Elkins for the same hours for the past 14 years are 85 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 63 stations reporting, was 3.07 inches. The mean departure from the normal for 50 stations having ten or more years of record was + 0.51. The precipitation was heaviest over the west-central counties and thence eastward to the crest of the mountains, and lightest over the eastern panhandle and extreme north-central and extreme southeast counties. Up to the 12th, the rainfall was confined to scattered light showers on several days from the 2d to the 9th. The falls in the southern counties during that period, however, were unimportant. Precipitation was general on the 12th, 14-15th, 19-20th, and 27th, and west of the crest of the mountains on the 29th and 30th, being moderately heavy on the 14-15th. Snow flurries, the first of the season in nearly all sections, occurred at many stations on the 15th and from the 20th to the 23d. Light snow fell on the 29th and 30th. At Pickens, however, 1 inch fell on the 15th, 3 inches on the 19-20th, and 8 inches on the 29-30th.

WIND.

The average wind velocity at Parkersburg was 6.7 miles per hour, or 0.6 mile above the November average for the past 26 years. The average at Elkins was 4.9 miles per hour, or 0.6 mile above the November average for 15 years. The highest velocity at Parkersburg was 29 miles per hour from the northwest on the 28th, and at Elkins 28 miles per hour from the southeast on the 18th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 55 per cent of the possible amount, or 22 per cent above the November average for 18 years. The average at Elkins was 52 per cent, or 17 per cent above the November average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 6th, 8th, 13th, and 18th; Bayard, 6th; Charleston, 4th, 6th, 8th, 10th, 13th, and 24th; Creston, 13th; Dam No. 22, 6th and 13th; Elkins, 6th, 8th, 10th, 13th, 25th, and 28th; Fairmont, 6th, 7th, 8th, 13th, 25th, 26th, and 28th; Grafton, 1st, 5th, 6th, 8th, 9th, 10th, 11th, and 13th; Green Sulphur Springs, 8th; Mannington, 7th, 8th, 13th, 26th, and 28th; New Cumberland, 6th,8th, 10th, 13th, 25th, 26th, and 28th; Philippi, 13th; Piedmont, 18th, 25th, 26th, and 28th; Robertsburg, 6th, 13th, and 28th; Romney, 6th, 7th, and 8th; Wheeling, 25th; Williamson, 1st, 3d, 10th, 13th, 24th, and 28th.

Hail: Grafton, 19th; Holcomb, 4th; Marlinton, 4th; Smithfield, 5th.

Halo, lunar: Bayard, 18th and 25th; Elkins, 13th; Pickens, 13th; Parkersburg, 13th and 20th.

Haze, light: Bayard, 8th, 18th, and 25th.

Sleet: Bens Run and Wheeling, 19th.

Smoke: Bayard, 26th; Lost Creek, 6th, 7th, and 10th; Mannington, 6th.

Thunderstorms (dates and number of stations reporting): 1st, 1; 2d, 3; 4th, 8; 5th, 2; 7th, 7; 9th, 1; 18th, 1.

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	42.5	80	8	3.04	....	....	....	..	..	..
1892	41.7	84	3	3.10	....	....	....	..	..	..
1893	41.4	74	3	2.12	3.22	0.47	....	13	6	11
1894	39.8	82	5	2.11	3.47	0.25	....	12	6	12
1895	44.6	87	12	2.35	4.00	0.20	....	12	8	10
1896	48.1	80	10	3.50	5.07	1.56	....	10	8	12
1897	45.0	76	13	4.45	7.15	0.30	....	9	9	12
1898	41.4	75	3	2.84	4.74	1.00	....	9	11	10
1899	45.6	76	11	1.93	3.49	0.20	T.	11	8	10
1900	45.5	86	9	5.20	8.88	2.71	2.8	8	8	14
1901	38.0	79	7	2.51	5.35	1.23	4.3	8	6	16
1902	50.3	83	12	3.27	4.56	1.23	0.7	11	6	13
1903	38.0	80	4	2.46	4.98	0.67	4.6	11	8	11
1904	41.2	75	9	0.64	3.06	0.07	1.4	12	7	11
1905	41.8	74	10	3.44	5.67	0.67	T.	13	7	10
1906	44.2	84	13	2.39	5.50	0.35	2.2	15	5	10
1907	41.8	74	13	3.40	7.05	1.41	1.0	10	8	12
1908	43.3	81	6	1.14	2.73	0.48	5.2	15	8	7
1909	49.1	84	12	1.34	3.85	0.23	0.2	14	7	9
1910	37.3	75	5	1.95	4.41	0.56	1.8	8	7	15
1911	40.5	83	7	2.74	5.54	1.27	2.0	10	7	13
1912	42.8	78	2	1.69	4.08	0.40	0.9	14	7	9
1913	44.5	82	1	4.49	7.50	0.61	13.4	12	5	13
1914	42.6	84	2	1.32	2.27	0.50	2.9	16	6	8
1915	45.2	85	11	3.06	5.99	1.15	1.1	13	8	9
Means and Extremes..	43.0	87	4	2.62	8.88	0.07	2.6	32	7	11

Climatological Data for November, 1915.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	12	40.2	+1.9	69	11	11	23	37	2.85	+0.21	0.61	2.5	14	6	13	11	w.	G. C. Dixon
Burlington	Mineral	875	20	42.4	+0.1	75	1	18	23	37	1.55	−0.28	0.70	0	4	10	19	1	nw.	J. W. Vandiver
Franklin	Pendleton		8																	William McCoy
Harpers Ferry	Jefferson	244	25	...	...	...	...	...	...	...	1.45	−0.86	0.95	0	2	...	...	...	w.	S. W. Lightner
Lost City	Hardy		8	41.8	.....	72	2	20	23 †	30	2.61	.....	0.96	0	6	17	8	5	n.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	43.4	+0.5	79	1	23	23	42	1.29	−0.91	0.87	0	4	20	6	4	w.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	...	...	...	...	...	...	...	1.67	0	0.61	T.	7	17	9	4	.....	M. S. Henkel
Piedmont	Mineral	919	0	43.4	.....	74	1	21	23	36	1.92	.....	0.52	T.	10	15	4	11	nw.	C. A. Suter, Jr
Romney	Hampshire	824	17	45.6	+3.2	80	2	20	17 †	39	1.67	−0.31	0.50	T.	7	4	22	4	.....	Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	44.8	+1.1	76	12	19	23	41	1.52	−0.19	0.50	0	5	19	9	2	w.	J. M. Mallow
Averages and	Extremes	.....	....	43.1	+1.4	80	2	11	23	30	1.84	−0.33	0.96	0.3	7	14	11	5	w.	
Northern Division.																				
Bens Run	Pleasants	622	13	46.2	+3.2	78	11	23	30	38	3.13	+0.64	0.85	1.0	7	17	7	6	.....	J. D. Riggs
Brandonville	Preston	1,809	1	...	...	...	...	...	...	...	3.73	.....	1.20	0.5	7	...	...	...	.....	W. T. Miller
Buckhannon	Upshur	1,411	24	45.2	+3.9	78	26	21	23	42	3.60	+0.13	0.90	2.0	11	17	3	10	.....	H. A. Darnall
Cairo	Ritchie	674	12	48.0	+4.3	79	12	22	17	50	3.74	+1.17	1.06	1.5	7	13	7	10	w.	Van A. Zevely
Central Station	Doddridge	950	12	43.6	+1.1	77	8	19	16 †	48	3.22	+0.74	0.89	1.4	8	7	3	13	sw.	G. W. Sherwood
Cheat Bridge	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	2.95	.....	1.15	4.5	10	.....	.....	.....	.....	
Cortland	Tucker	3,300	1	...	...	...	...	...	...	...	2.79	.....	0.88	...	7	...	...	...	.....	Samuel Harmon
Creston	Wirt	701	13	47.5	+4.1	79	11	21	25 †	47	3.50	+1.21	1.23	1.0	11	11	6	14	w.	J. M. Reed
Davis	Tucker	3,093	7	...	...	...	...	...	...	...	4.05	.....	0.99	7.5	13	13	3	14	.	Ross C. Male
Elizabeth	Wirt	646	4	...	...	...	...	...	...	...	3.34	.....	1.58	...	6	...	...	...	.....	E. D. Ball
Elkins	Randolph	1,940	15	42.8	+3.2	76	11	19	30	44	3.10	+0.24	1.54	3.8	18	8	9	13	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	44.1	+1.4	79	11	21	23	52	2.17	0.59	1.12	T.	12	18	0	12	w.	F. P. Hall
Glenville	Gilmer	738	25	45.8[a]	+2.4	81[a]	11	15[a]	16 †	56[a]	3.53	+0.51	1.07	1.5	8	12	15	3	sw.	M. T. Brannon
Grafton	Taylor	1,000	22	48.4	+5.5	81	11	21	23	44	4.03	+1.88	0.86	1.0	10	18	3	9	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	45.2	+3.9	78	11	18	23	47	3.37	+0.94	1.42	0.5	10	18	2	10	w.	Allen Smith
Mannington	Marion	974	12	45.2	+4.4	77	11	20	23	44	2.66	+0.33	0.72	0.4	13	13	7	10	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	44.4[b]	+1.1	74[b]	11	21[a]	30	36[b]	2.07	−0.84	0.72	T.	9	14	6	10	sw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	47.8	+5.0	77	11	24	16	43	2.68	+1.00	1.32	T.	5	11	5	14	sw.	M. Z. White
New Cumberland	Hancock	987	15	42.7	+1.5	75	11	19	23	44	2.43	+0.69	0.66	T.	9	5	15	10	nw.	M. F. Smith
New Martinsville	Wetzel	634	21	49.5	+5.2	85	11	24	16 †	43	3.29	+0.59	0.95	T.	8	14	3	13	s.	Wm. Ankrom
Parkersburg	Wood	638	26	47.0	+3.8	77	11	24	30	32	3.32	+0.49	1.59	0.1	13	13	7	10	se.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	41.3	+0.1	75	11	17	23	46	3.26	+0.80	1.45	1.1	9	13	5	12	.....	J. W. Swisher
Philippi	Barbour	1,149	22	47.0	+4.1	76	11	21	30	39	2.07	−0.87	0.74	T.	7	15	9	6	w.	Okey L. Robinson
Pickens	Randolph	2,697	24	45.4	+4.7	77	6 †	13	30	51	4.59	+0.81	0.98	12.0	11	14	5	10	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29	...	...	...	...	...	...	...	3.22	+0.39	1.40	1.0	15	...	...	...	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7	...	...	...	...	...	...	...	3.47	.....	1.64	T	8	...	...	...	e.	J. O. Goodman
Smithfield	Wetzel	835	10	44.2	.....	77	11	20	23	44	3.70	+1.02	1.45	2.0	16	9	13	8	nw.	G. M. Whisler
Terra Alta	Preston	2,612	14	46.7	+4.6	67	11	18	29 †	40	5.99	+2.79	1.58	1.5	10	9	2	13	w.	H. C. Shaffer
Wellsburg	Brooke	1,225	20	43.3	−2.3	71	11	21	30	34	2.85	+0.90	0.80	T.	10	10	9	11	sw.	C. P. Waugh
Weston	Lewis	1,026	26	45.2[c]	+2.9	80	10	22	16 †	44	2.16	1.13	0.70	2.0	8	12[d]	8	6	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	44.2	.....	79	11	23	30	47	2.79	+0.38	1.02	T.	12	15	4	11	sw.	Miss M. B. Forsyth
Averages and	Extremes	.....	.....	45.5	+3.3	85	11	13	30	56	3.20	−0.64	1.73	1.6	10	13	6	11	w.	
Southern Division.																				
Bancroft	Putnam	574	11	46.0	+1.1	80	8 †	20	30	47	3.91	+1.57	2.05	0.6	8	15	0	15	ne.	R. E. Dent
Beckley	Raleigh	2,440	15	48.5	+6.2	79	7	12	30	58	2.84	+0.38	1.25	T.	4	21	1	8	w.	John A. Ewart
Bluefield	Mercer	2,558	20	46.7	+2.3	73	11	16	30	57	2.55	+0.29	1.00	2.0	5	18[e]	3	6	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	29	49.8	+1.9	85	1	24	30	49	4.12	+1.32	2.00	T.	9	18	2	10	w.	C. V. Lewis
Clay	Clay	706	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	Prof. E. H. Knabenshue
Cuba	Jackson	650	14	48.2	+4.9	79	8	20	16 †	42	3.21	+0.81	0.90	1.0	8	15	14	3	nw.	C. T. Perry
Dam 22 O. R.	Jackson	538	...	...	...	...	...	...	...	...	3.50	.....	1.81	0.8	11	...	...	...	sw.	U. S. Engineer Office
Dunlow	Wayne	703	7	...	...	...	...	...	...	...	4.20	.....	2.04	T.	5	17	8	5	sw.	George Damron
Elkhorn	McDowell	1,933	22	48.4	+2.7	74	11	21	30	36	2.70	+0.07	0.84	1.4	9	9	9	12	w.	J. J. Lincoln
Evans	Jackson	606	0	...	...	...	...	...	...	...	4.05	.....	1.05	0.8	9	12	3	15	.....	B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	44.0	+1.5	75	1 †	17	16 †	47	2.85	+0.55	0.90	T.	6	20	4	6	.	W. H. Gwinn
Hinton	do	1,450	25	44.6	+0.2	77	1 †	20	17	47	2.17	0.02	0.78	T.	9	14	7	9	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	45.4	.....	76	11	15	16	50	3.85	.....	.....	6.2	11	14	5	11	.....	R. E. Ferguson
Huntington	Cabell	538	19	46.2	+2.6	78	1 †	25	30	38	4.42	+1.80	1.90	0.5	9	13	5	12	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	43.6	+2.3	72	1	19	17 †	41	2.17	−0.31	0.64	0.5	6	15	4	11	nw.	Geo. T. Argabrite
Logan	Logan	687	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	W. H. Oliver, Jr
Madison	Boone	704	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	18	37.5	+0.7	64	1 †	16	17	36	2.82	+0.01	0.86	2.0	9	9	19	2	nw.	S. L. Brown
Nuttallburg	Fayette	2,252	22	41.0	0	70	1 †	12	30	31	1.15	−1.41	0.50	0.2	....	1	15	2	.....	Miss Donna Tully
Point Pleasant	Mason	553	24	47.4	+2.4	79	1 †	18	30	45	4.33	+1.55	1.90	1.0	10	8	10	12	sw.	W. D. Holmes
Powellton	Fayette	933	17	49.8	+5.4	79	11	23	30	43	3.21	+0.61	1.05	0	6	13	10	7	.....	S. C. Lampert
Robertsburg	Putnam	574	14	44.4	+1.0	77	7	19	30	46	4.25	+0.87	2.15	T.	9	16	1	13	.....	E. C. Brace
Ryan	Roane	700	11	46.6	+3.6	80	26	19	16 †	50	4.91	+2.68	1.20	1.0	8	14	7	9	.....	Wm. E. Ryan
Spencer	do	784	16	45.4	.....	77	7 †	19	16 †	45	4.17	+1.87	2.15	1.0	9	9	19	11	.....	A. M. McKown
Sutton	Braxton	839	11	...	...	...	...	...	...	...	2.96	+0.01	1.90	0	...	14	8	8	.....	Ben Gillespie
Union	Monroe	2,250	10	44.5[a]	+4.8	75[a]	2 †	19	17 †	49[a]	2.13	−0.15	0.83	T.	4	...	...	...	.....	J. C. Shanklin
White Sulphur Springs	Greenbrier	1,940	5	44.2	....	73	1	18	17	45	1.93	.....	1.42	T.	3	18	6	6	sw.	J. M. Ayres
Williamson	Mingo	660	13	48.5	+3.5	84	11	25	30	43	2.98	−0.29	1.58	2.0	8	15	8	7	w.	J. F. Keyser
Averages and	Extremes	.....	.....	45.7	+2.4	85	1	12	30	58	3.26	+0.65	2.15	0.8	8	14	7	9	w.	
State Averages and	Extremes	.....	.....	45.2	+2.7	85	1 †	11	23	58	3.07	+0.51	2.15	1.1	9	13	8	9	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for November, 1915.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac	T.	T		.09			.39	.01	.24			.18		.37	.55				.61	.02	.08	.04				.15	T.		.07	.05		2.85
Arlington	do			T.			T.		T.				T.		*	.70				.70								.15					1.55
Franklin	do																																
Harpers Ferry	do															.95				.50													1.45
Post City	do				.10			.60					.04		.96					.88	.63											2.61
Martinsburg	do				T.				T.				.09		*	.87				.33												1.29
Moorefield	do		.01			.01		.60					.04			.61				.35							.05			T.		1.67
Piedmont	do		.04		.10			.28	T.	.06			.01		.37	.52				.43	.01		T.				.10			T.		1.92
Romney	do		T.		.03			.24	.47	.05			.08		.30	T.				.50												1.97
Upper Tract					.10	T.		.50							.42	.20					.30						T.						1.52
Northern Division.																																	
Ohio Run	Ohio						.09						.34		.68	.85				.73								.33		.17			3.13
Grandonville	Monongahela							.76		.09				.45		1.20				.83								.35			.05		3.73
Hackhannon	do		.07		.18			T.	T.				.60		.90	.90				.40	.04	.06					.30		.05	.10		3.60
Hiro	Little Kanawha												.55		.75	1.06				.78	.20						.25		.15			3.74
Central Station	Middle Is. Creek								T.				.48		.58	.89				.74	.09						.30		.12	.02		3.22
Great Bridge					.14			.16						.50		1.15	.15			.30	.15							.25	.05	.10		2.95
Hartland	Monongahela	.12			.39			.49						.24		.88				.44							.23					2.79
Hoston	Little Kanawha		.06							.02			.20	.15		1.73	.05			.60	.30	T	T.				.30		.05	.10		3.56
Levis	Monongahela		.17			.48		.50		.16				.37		.99	.20			.47	.20		.05		T.			.17	.04	T.	.25		4.05
Lizabeth	Little Kanawha													.60		1.58				.68								.36		.07	.05		3.34
Elkins ***	Monongahela	.06	.06		.12		.02	.14	.01	.07			.34		1.11	.50			.02	.20	.06	.05	T	T.	T			.19	.01	.07	.07		3.10
Fairmont	do		T.			.03		.06		.01			.04	.31		1.12	.08			.20	.17	T.	T.	T.				.10	T.	.03	.02		2.17
Glenville	Little Kanawha									.03			.52	T.		1.67	T.			.60	.15							.34		.12	.10		3.53
Grafton	Monongahela							.57	.03	.06			.46		.82	.86				.25	.30	T.	T.	T				.20		.50	T.		4.03
Hast Creek	do		T		.20				T.				.40		.61	.81				.71	.22	.04	T.					.22		.16	.06		3.37
Huntington	do				.02			.04	.02	.01			.28		.53	.72				.67	.14	.02		T.				.10		.09	.02		2.66
Morgantown	do				.04			.30	.01	.03			.38			.72				.55	.05									.04			2.07
Moundsville	Ohio				.05								.56			1.32				.58	.17	T.								T.			2.68
New Cumberland	do				T.			.56	.13				.66		.08	.32				.55	T.	T.	T.	T.	.05		.02		.06	T.		2.43
New Martinsville	do								.10				.42		.50	.05				.72		.15					.30		.15	T.		3.29
Parkersburg ***	Ohio				T.				.11			.06	.39		1.25	.35			.26	.56	.05		T.	T.		.09	.09	.04	.06	.01		3.32
Parsons	Monongahela					.25	T.		T			.05	.50		1.45	T				.50	.05	T.	.05							.40	.01		3.26
Philippi	do				.04			.25	.06				.04		.49	.74				.45			T.							T.			2.07
Pickens	do		T.		.05			T.		.08			.88		.98	.37			.18	.65	.20	T						.40		.40	.40		4.59
Powlesburg	do		.02			.04		.30		.06			.02	.32		1.40	.22			.52	.36		.04	.02				.12		.04	.14		3.42
Saint Marys	Ohio					.05		T.				.35	.25	T.		1.64	.08			.80								.24			.06		3.47
Smithfield	Fishing Creek		.02			.11		.14	.04	.04			.33	.13		1.45	.12			.60	.26	.02			T.			.23	.02	.11	.08		3.70
Terra Alta	Monongahela	T.					1.10	.30					1.25	.12	1.38	.94			.10	1.15							T.		.05	.10		5.99
Wellsburg	Ohio				.05			.30					.80		.82	.60				.43	.05				.05		.20		.07	T		2.80
Weston	Monongahela		.20		1.16				.20				.30	.40	.60				.10											.20		2.16
Wheeling	Ohio				.01		T.			.01			.28	.30		1.02	.07			.55	.34	T.	T	T.	.01			.16	.01	.05	T.		2.79
Southern Division.																																	
Ameroft	Great Kanawha												.29	.52	.08	2.05				.51	.14						.24			.08		3.91
Beckley	do													.20	1.25	.49					T							.85					2.84
Bluefield	do												.10			1.00				.75								.50			.20		2.55
Charleston	do										T.		.25	.64	.15	2.00	.20			.30	.68							.25		.25	T.		4.12
Clay	do																																
Alba	Sand Creek								T.	T.			.45		.75	.90				.66	.10			T.		.20	T.		.05	.10		3.21
Man 22 O. R.	Ohio									.07			.25	.24	.02	1.81	.07			.55	.05						.27		.04	.03		3.50
Gunlow	Big Sandy										.60				2.04				1.18	.12						.26				T.		4.20
Kenova	do					T.				T.			.32		.84	.52		.14	.18	.12	T.						.35		.12	.11		2.70
Evans	Ohio								T.	.05			.42		1.03	1.07	T.		T.	.95	.08						.33		.09	.03		4.05
Green Sulphur Spgs.	Great Kanawha		T.			T							.50		.45	.80				.90	T.						.30		.10			2.85
Hinton	do					T.							.06	.10	.18	.74	T.			.78	.08						.20		.01	.02		2.17
Holcomb	do				.12				.18				.25		*	1.90			.42	.25		.02					.35		*	.36		3.85
Huntington	Ohio												.42	.46	.16	1.90				.68	.12						.54		.12	.02		4.42
Lewisburg	Great Kanawha				T.								.34		.28	.45				.64	T.						.40		T.	.05		2.17
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do				.45			.04					.19		.72	.04				.86	.10		T.				.32		T.	.10		2.82
Mattallburg	do												.30		.33	.50					*	*	*	*	*	*				.02		1.15
Point Pleasant	Ohio									.04			.42	.20		1.90	.14			.85	.14						.48		.08	.08		4.33
Powellton	Great Kanawha												.45		1.05	.52				.45							.51		.23			3.21
Robertsburg	do												.35	.35	.05	2.10	.15			.69	.15						.35		.05	T.		4.24
Ryan	do					T.							.2		1.20	1.10			.57	.31		T.		T.			.72		.19	.10		4.91
	do																																
Spencer	Little Kanawha		.05							T.	.20			.34		2.15	T.	.15		.50	.23						.45		T	.10		4.17
Sutton	Great Kanawha												T.	.71		1.90	*	*	*	*	*	*					.35					2.96
Union	do												20	T.	.80				.83	T.						.30		T.	T.		2.13
White Sulphur Spgs.	do												.20		.31	T.				1.42									T.	T.		1.93
Williamson	Big Sandy					T.				T.			.40	.10	.32	1.58				.38	.08						.02			.10		2.98

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

|||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

†††† Probably incomplete.

Daily Temperatures for November, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Me
Panhandle Division.																																	
Bayard	Maximum	68	64	50	53	56	54	64	67	63	51	69	65	48	47	46	32	45	46	49	38	47	34	43	41	58	63	53	53	47	22	..	51.
	Minimum	48	47	29	27	36	22	36	36	44	24	35	44	31	29	25	16	27	25	34	27	33	19	11	29	21	30	32	23	22	15	..	29.
Burlington	Maximum	75	69	50	62	60	48	55	64	65	55	62	62	56	42	47	44	52	55	56	50	57	44	39	47	54	58	55	53	48	34	..	53.
	Minimum	38	48	36	25	32	34	36	33	46	27	30	41	29	28	33	25	21	20	40	37	37	20	18	27	23	28	32	32	81	24	..	31.
Martinsburg§	Maximum	79	67	59	55	60	49	56	63	67	57	62	62	60	46	48	46	53	57	60	52	58	40	42	48	48	54	57	53	45	37	..	54.
	Minimum	37	53	35	30	33	30	34	34	35	35	34	35	36	33	37	29	24	25	26	41	36	30	23	29	27	28	29	28	29	29	..	32.
Piedmont	Maximum	74	61	54	47	52	49	58	66	63	56	66	66	54	42	41	41	55	53	55	49	55	40	41	45	51	52	51	50	46	42	..	52.
	Minimum	38	53	36	32	40	26	40	46	49	30	34	45	32	32	36	25	24	24	38	37	40	26	21	31	28	30	42	31	34	25	..	34.
Romney	Maximum	79	80	73	53	50	62	62	64	73	58	65	65	62	54	50	50	56	53	59	53	61	48	43	52	53	56	59	57	56	40	..	58.
	Minimum	44	55	37	25	40	23	35	34	49	26	35	43	44	28	34	25	20	20	40	38	44	27	20	34	21	27	43	23	35	25	..	32.
Upper Tract	Maximum	75	71	57	60	63	55	55	73	72	63	68	76	58	48	48	45	54	51	51	55	54	56	48	49	60	59	57	54	51	35	..	57.
	Minimum	45	54	36	25	45	25	37	34	58	26	29	35	27	27	34	20	25	21	26	43	43	27	19	28	22	30	46	24	32	20	..	32.
Northern Division.																																	
Bens Run	Maximum	72	65	54	61	61	63	72	71	63	66	78	65	57	52	51	44	55	65	52	52	55	37	51	50	64	73	61	63	45	31	..	58.
	Minimum	41	49	33	30	40	32	42	40	44	33	44	45	31	37	32	24	26	29	39	35	32	27	26	34	28	35	35	33	28	23	..	34.
Buckhannon	Maximum	72	59	49	58	60	60	71	75	68	65	74	63	52	53	52	40	50	58	57	47	52	38	50	46	59	78	60	60	42	30	..	59.
	Minimum	50	49	31	27	45	27	47	50	45	32	39	50	30	31	33	23	25	23	33	32	38	28	21	32	25	36	36	25	30	22	..	33.
Creston	Maximum	76	70	58	65	64	66	76	71	66	67	79	70	54	61	52	43	57	62	55	57	55	44	52	53	68	71	67	63	57	34	..	61.
	Minimum	41	55	29	29	42	29	40	41	46	30	41	49	30	34	35	22	23	25	36	35	43	31	23	30	21	31	46	26	32	21	..	33.
Elkins	Maximum	71	63	47	60	59	64	71	72	62	70	76	61	51	46	48	42	51	55	56	53	52	32	50	48	68	65	58	58	38	24	..	55.
	Minimum	40	41	29	26	32	27	44	41	34	28	37	42	30	30	26	23	28	26	33	31	29	20	19	29	24	33	29	24	24	19	..	29.
Fairmont§	Maximum	74	63	55	60	59	62	73	76	65	67	79	60	58	52	43	44	55	64	53	54	48	39	52	52	70	77	52	67	35	25	..	57.
	Minimum	35	55	30	27	35	29	31	39	40	32	32	44	30	30	35	22	23	24	25	33	34	27	21	24	24	25	32	25	26	22	..	30
Glenville	Maximum	78	73	63	56	69	69	..	80	73	78	81	78	53	49	54	49	58	64	58	57	57	46	53	50	71	74	72	70	64	34	..	63.
	Minimum	38	56	30	20	36	28	..	34	42	22	33	44	26	33	27	15	16	15	33	27	35	22	15	24	22	23	40	19	31	23	..	28
Grafton	Maximum	79	68	57	65	68	65	73	80	67	71	81	70	63	58	52	43	58	65	56	58	52	56	55	52	72	75	62	65	59	31	..	62.
	Minimum	40	42	29	27	39	31	44	41	48	30	40	50	36	47	34	22	23	25	38	34	38	32	21	35	28	34	45	27	30	22	..	34.
Lost Creek	Maximum	74	70	54	60	62	64	75	74	64	65	78	70	55	51	54	44	57	64	58	50	54	41	53	51	68	71	61	66	56	31	..	59.
	Minimum	52	54	27	25	38	26	42	38	35	32	38	50	27	45	33	21	22	19	37	33	40	28	18	30	21	30	45	23	30	22	..	32.
Mannington	Maximum	73	67	53	55	60	58	71	75	63	62	77	73	55	51	53	42	53	62	55	48	55	39	53	47	68	72	61	65	55	31	..	58.
	Minimum	38	53	28	25	35	25	39	37	40	28	36	51	27	31	33	21	22	22	38	34	37	28	20	36	24	30	46	25	31	23	..	32.
Morgantown	Maximum	66	66	49	53	..	..	..	..	..	74	70	52	50	52	40	49	57	51	45	52	39	50	47	..	..	64	66	57	30	..	52.
	Minimum	57	49	36	30	40	26	38	50	41	30	41	49	32	36	32	23	31	36	36	32	38	26	23	34	36	..	44	30	28	21	..	36
New Cumberland	Maximum	72	66	61	54	56	64	63	69	62	55	75	70	58	44	45	40	52	57	51	44	44	35	49	43	65	72	60	60	55	33	..	55.
	Minimum	35	42	31	24	35	20	32	36	39	20	38	42	21	26	28	20	26	24	34	31	32	24	19	33	26	37	42	22	29	21	..	29.
New Martinsville	Maximum	77	75	64	61	65	65	79	75	71	72	85	77	64	57	63	51	63	71	66	50	55	50	53	49	70	75	60	72	60	41	..	63.
	Minimum	46	51	31	29	36	32	40	42	38	33	42	49	30	35	34	24	24	28	40	36	36	28	25	36	27	35	40	29	34	24	..	34.
Parkersburg	Maximum	74	66	52	65	59	60	74	73	62	64	77	64	55	51	48	43	52	61	52	53	55	36	48	47	66	70	55	60	43	30	..	57.
	Minimum	60	44	36	34	42	36	47	49	42	36	49	41	29	39	30	27	31	32	36	37	31	30	30	35	34	47	36	31	29	24	..	36.
Parsons	Maximum	65	71	70	49	48	47	56	72	61	67	75	60	48	46	47	40	53	59	56	47	53	38	52	65	66	69	60	50	40	30	..	55.
	Minimum	27	25	26	30	23	31	26	33	39	27	33	38	31	29	29	19	21	23	25	32	28	20	17	30	21	29	33	27	27	20	..	27.
Philippi	Maximum	70	73	54	57	61	60	70	73	75	65	76	74	53	50	52	52	52	61	58	48	54	38	50	50	68	72	63	63	59	32	..	59.
	Minimum	51	50	33	31	42	27	45	49	39	26	50	48	31	32	32	23	28	31	35	32	34	25	23	33	31	43	39	24	29	21	..	34.
Pickens	Maximum	74	63	53	57	58	77	69	75	70	77	74	63	64	50	50	47	60	56	52	48	52	46	..	52	73	75	52	53	46	38	..	59.
	Minimum	51	40	30	26	34	28	47	46	35	26	46	44	27	37	27	14	24	29	28	28	33	20	..	30	29	40	32	28	20	13	..	31.
Terra Alta	Maximum	65	66	61	63	60	58	64	62	66	58	67	56	58	61	62	64	66	66	62	..	..	..	..	..	..	58	58	60	58	50	..	61
	Minimum	40	36	34	30	34	34	38	33	35	31	32	20	24	36	36	34	40	38	34	..	..	..	..	..	..	34	31	33	18	18	..	32
Wellsburg	Maximum	68	61	46	52	54	59	63	60	54	54	71	66	50	47	46	57	46	55	47	42	46	32	46	42	61	66	57	56	52	29	..	52.
	Minimum	53	44	33	30	39	29	37	43	29	38	45	44	34	35	30	23	29	29	35	32	32	25	22	34	31	42	37	29	29	21	..	33.
Weston§	Maximum	76	62	54	64	58	74	76	64	68	80	60	65	62	54	44	56	62	..	..	..	..	54	58	62	64	60	58	56	54	40	..	61.
	Minimum	32	36	32	28	40	30	34	36	34	42	58	36	34	32	24	22	26	30	..	..	..	..	22	26	30	32	28	26	24	22	..	31
Wheeling§	Maximum	77	60	55	56	51	61	68	70	64	64	79	56	62	49	40	46	55	64	51	53	47	35	54	48	67	74	48	64	36	29	..	56.
	Minimum	34	49	32	30	34	30	31	40	40	32	33	53	30	31	35	25	26	26	26	35	36	29	26	33	27	27	37	29	30	23	..	32.
Southern Division.																																	
Beckley	Maximum	78	70	72	67	70	78	79	78	78	70	78	70	69	55	51	43	57	58	60	58	67	69	60	62	62	64	62	56	56	54	..	65
	Minimum	47	57	28	30	32	29	30	20	21	28	45	48	39	42	22	25	31	31	31	31	28	27	28	31	31	32	38	34	26	12	..	31
Bluefield	Maximum	72	66	54	67	63	66	72	71	70	65	73	68	51	49	57	45	57	47	49	49	49	50	49	54	55	65	57	52	57	29	..	57.
	Minimum	47	54	35	30	49	35	45	44	57	33	46	49	36	43	30	22	28	35	36	29	26	25	26	34	33	37	38	30	27	16	..	35
Charleston	Maximum	85	74	68	69	70	69	75	78	75	69	80	75	68	61	55	50	57	60	60	55	58	56	54	52	69	74	66	65	63	56	..	65.
	Minimum	36	59	34	31	32	33	33	43	45	34	33	45	35	35	40	25	26	27	34	35	39	33	28	30	28	31	31	30	35	24	..	34.
Elkhorn	Maximum	71	70	61	67	64	67	66	72	68	69	74	72	53	59	55	49	53	49	48	48	49	44	51	51	61	66	65	57	57	31	..	58.
	Minimum	52	61	34	32	54	36	36	48	59	36	38	51	36	44	35	25	27	38	37	32	34	29	27	31	38	40	43	36	31	21	..	38.
Green Sulphur Spgs.	Maximum	75	65	67	69	63	70	74	75	70	65	75	64	52	46	47	45	56	52	53	52	51	46	49	52	64	66	59	55	50	35	..	58.
	Minimum	30	44	31	23	41	23	38	37	47	24	31	43	27	34	30	17	17	18	36	30	27	25	20	22	25	29	38	23	28	20	..	29.
Hinton§	Maximum	77	72	68	69	66	66	77	77	71	67	72	58	53	48	41	48	58	52	49	55	54	44	44	54	60	68	54	56	44	29	..	58.
	Minimum	34	38	38	28	31	28	30	42	42	31	32	38	34	33	40	21	20	25	28	33	30	30	24	26	26	27	31	29	29	22	..	30
Holcomb§	Maximum	75	60	52	67	60	70	74	75	66	72	76	60	60	54	37	46	46	53	50	52	48	40	51	56	72	67	56	58	33	23	..	57.
	Minimum	33	42	26	25	32	25	26	30	42	25	26	40	26	46	35	15	20	27	40	30	32	26	21	25	28	34	37	27	31	18	..	29
Huntington§	Maximum	75	62	55	68	59	63	73	75	60	62	75	57	56	51	41	45	54	60	49	55	49	42	51	50	65	67	52	60	38	30	..	56.
	Minimum	38	57	34	33	37	36	37	45	46	37	37	50	34	34	37	27	27	28	34	36	38	31	31	31	31	32	46	30	32	25	..	37
Lewisburg	Maximum	72	65	52	62	61	65	71	71	66	63	68	61	52	45	46	44	55	46	51	51	51	43	48	49	56	61	54	54	49	29	..	55.
	Minimum	34	51	34	24	51	24	42	38	52	26	32	43	28	35	31	21	19	26	36	31	33	27	21	25	25	29	40	26	28	19	..	31
Madison§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marlinton	Maximum	64	62	46	54	54	58	64	62	60	54	62	54	44	38	40	36	38	44	47	44	44	36	40	44	50	52	50	46	36	24	..	48
	Minimum	32	40	32	20	36	22	40	38	48	20	28	38	24	28	26	17	16	18	28	28	34	22	18	22	18	20	30	20	24	18	..	26
Point Pleasant	Maximum	79	68	58	66	63	67	78	79	66	66	79	73	56	52	53	47	58	63	54	54	56	42	51	53	71	74	63	64	60	35	..	61
	Minimum	51	51	27	30	39	27	39	41	42	29	41	47	27	33	31	21	24	24	37	34	38	28	28	27	26	38	41	25	30	18	..	33
Powellton	Maximum	77	71	60	71	71	70	73	77	69	72	79	76	54	75	52	42	53	57	58	53	54	52	52	52	70	72	65	60	57	35	..	62
	Minimum	41	58	32	30	56	32	47	55	55	32	44	51	33	32	33	24	27	32	34	33	35	32	27	30	33	38	44	32	33	23	..	36
Robertsburg§	Maximum	75	63	58	65	61	68	77	75	62	57	61	60	54	52	42	48	58	60	50	50	50	41	50	55	70	72	52	63	39	35	..	57
	Minimum	34	55	27	28	41	29	31	40	44	30	40	41	30	32	35	21	22	24	31	33	34	29	25	25	26	27	35	25	27	19	..	31
Ryan	Maximum	77	71	56	67	70	73	75	78	65	70	79	62	54	52	55	48	65	65	55	55	56	43	56	58	72	80	66	60	55	33	..	62
	Minimum	37	40	24	26	40	26	25	37	45	26	42	48	28	34	32	19	20	23	38	39	40	28	24	24	23	31	37	24	30	19	..	30
Spencer§	Maximum	72	66	59	64	67	68	77	76	71	77	67	58	54	52	39	60	63	64	52	45	36	61	64	64	75	72	70	60	31	28	..	60
	Minimum	29	55	25	27	28	26	45	39	27	41	59	50	28	42	38	19	22	19	27	34	36	29	20	30	32	35	35	30	24	20	..	31
Union§	Maximum	72	75	55	70	69	73	74	75	72	67	71	75	73	75	48	44	56	54	46	57	52	40	54	53	59	64	53	54	37	..	..	60
	Minimum	35	50	26	23	26	24	32	33	40	23	29	31	30	30	30	20	19	22	35	31	23	28	20	22	24	23	38	30	27	19	..	28
White Sulphur Spgs.	Maximum	73	67	55	66	62	66	72	70	69	68	72	68	60	54	46	41	52	47	53	54	53	44	54	54	57	62	56	52	47	33	..	57.
	Minimum	29	52	35	23	45	23	38	37	36	23	45	40	38	29	23	28	18	19	35	26	40	29	29	24	24	26	36	23	29	21	..	30
Williamson§	Maximum	79	73	60	75	68	75	80	78	70	74	81	61	53	55	40	50	59	61	50	60	53	44	55	56	58	60	55	66	38	34	..	60
	Minimum	40	45	34	34	36	40	43	45	50	39	38	48	36	36	36	27	28	30	47	37	38	30	30	32	31	35	41	34	31	25	..	36

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
TRACE
TRACE
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
C.A.C.B

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

DECEMBER, 1915

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JANUARY 28, 1916

Departure of the Mean Temperature from the Normal, December, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIII. PARKERSBURG, W. VA., DECEMBER, 1915. NO. 12.

GENERAL SUMMARY.

The past month was much wetter than usual, the average precipitation, 4.35 inches, being the heaviest of record for December, except in 1901, 1902, 1906, and 1914. While the snowfall was also slightly in excess, the ground was bare nearly all the month in most of the agricultural sections and the conditions were favorable for grazing and outdoor work. Although the temperature averaged somewhat below the normal, the daily variations were generally slight and the extremes were well within the records for December. Heavy rains near the close of the second and third decades caused marked rises in the streams and rivers.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.11 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.53 inches on the 31st, and 29 31 inches on the 29th. Elkins, 30.52 inches on the 31th, and 29.38 inches on the 29th.

TEMPERATURE.

The monthly mean for the State, 50 stations reporting, was 32.8°. The mean departure from the normal for 43 stations having ten or more years of record was — 0.8°. Excepting the 8th, 12th, and 17th, the temperatures were below the normal in nearly all sections until the 22d, with lowest readings on the 1st-3d, 5-6th, 11th, and 15-16th. Seasonably warm weather prevailed after the 22d, except on the 26-27th, when the averages were near the normal. The highest temperatures occurred generally on the 17-18th and 25th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 80 per cent; 8 p. m., 78 per cent. The December averages for the same hours for the past 26 years are 83 and 76 per cent, respectively. Elkins, 8 a. m., 86 per cent; 8 p. m., 81 per cent. The December averages for Elkins for the same hours for the past 14 years are 85 and 79 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 61 stations reporting, was 4.35 inches. The departure from the normal for 49 stations having ten or more years of record was + 1.09 inches. The precipitation was heaviest over the western counties and northern mountain sections, and lightest over the eastern panhandle and southeast counties. Light rain or snow occurred on the 2-3d and 8-9th, moderate snow or rain on the 13-14th, heavy rain on the 17-18th, with light snow in sections, moderate rain and snow on the 25-26th, and heavy rain on the 28-29th Scattered precipitation was also recorded on several other days. The greater part of the snowfall was received on the 13-14th and 25-26th.

RIVERS.

The heavy rains near the close of the second and third decades, falling on frozen ground, caused marked rises in the streams and rivers. Considerable snow was also on the ground at the beginning of the second rain storm. The Little Kanawha river reached a stage of 22 feet at Glenville and 20.7 feet at Creston on the 18th, and the following stages were reached in the Ohio on the 20th: Wheeling, 31.9 feet; Marietta, 29.7 feet; Parkersburg, 31.2 feet; Point Pleasant, 39.9 feet. The month also closed with the Ohio only a few feet below a bank-full stage.

WIND.

The average wind velocity at Parkersburg was 6.2 miles per hour, or normal, as compared with the December average for the past 25 years. The average at Elkins was 4.5 miles per hour, or 0.3 mile below the December average for 15 years. The highest velocity at Parkersburg was 34 miles per hour from the northwest on the 8th, and at Elkins 22 miles per hour from the south on the 25th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 15 per cent of the possible amount, or 9 per cent below the December average for 17 years. The average at Elkins was 19 per cent, or 10 per cent below the December average for 15 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 2d; Bayard, 16th; Davis, 18th, 28th, and 30th; Elkins, 17th; Grafton, 24th, 26th, 27th, and 31st; Green Sulphur Springs, 3d, 4th, and 30th; Holcomb, 31st; New Cumberland, 3d, 4th, and 17th; Pickens, 18th and 30th; Robertsburg, 4th and 6th; Terra Alta, 30th and 31st.

Halo, lunar: Bayard, Elkins, and Pickens, 20th; Wellsburg, 23d.

Halo, solar: Wellsburg, 11th.

Haze: Bayard, 5th.

Sleet: Bancroft, 16th; Bayard, 17th and 29th; Burlington, 17th; Charleston, 16th; Davis, 29th; Elkins, 11th, 12th, 18th, and 25th; Holcomb, 23d; Huntington, 11th; Lost City, 17th; Marlinton, 16th; Parkersburg, 11th; Piedmont, 17th; Romney, 17th; Terra Alta, 29th; Wheeling, 17th.

COMPARATIVE DATA FOR DECEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	40.9	75	6	3.27	....	....	....	..	..	..
1892	34.1	72	-10	2.91	....	....	....	..	..	..
1893	37.1	76	7	2.05	3.73	0.56	....	10	8	13
1894	36.2	80	29	4.04	6.56	1.71	....	11	7	13
1895	36.9	72	6	2.87	4.14	1.85	7.1	8	9	14
1896	35.3	67	2	1.68	2.88	0.57	....	12	9	10
1897	37.3	72	-4	4.00	6.79	2.05	....	6	9	16
1898	33.4	69	12	2.66	4.23	0.71	7.0	12	8	11
1899	33.3	77	17	2.81	4.46	1.22	3.9	11	8	12
1900	31.6	66	3	2.26	3.45	1.32	1.0	11	7	13
1901	32.3	75	9	5.84	8.97	3.57	3.8	7	8	16
1902	33.9	70	2	5.33	9.95	2.01	9.4	5	7	19
1903	26.5	59	-11	2.00	4.43	0.30	7.8	12	8	11
1904	32.8	71	20	3.12	5.91	1.63	9.8	8	7	16
1905	35.6	70	3	3.11	5.24	1.30	3.4	11	6	14
1906	35.9	70	-1	4.73	11.15	1.83	6.2	5	6	20
1907	35.5	70	2	3.36	9.31	0.70	5.2	9	8	14
1908	36.4	73	5	3.03	7.36	1.06	6.0	9	8	14
1909	28.8	78	-10	2.55	6.00	1.16	10.9	9	8	14
1910	28.4	72	-8	2.72	6.90	1.00	14.6	7	7	17
1911	39.3	74	4	3.27	5.58	1.25	1.6	9	5	17
1912	35.8	76	-6	2.88	5.55	1.45	7.1	12	7	12
1913	36.4	68	3	2.82	3.81	1.10	2.9	9	8	14
1914	36.3	70	20	5.46	8.04	2.58	12.5	7	4	20
1915	32.8	68	0	4.35	7.19	1.35	7.6	5	7	19
Means and Extremes	34.4	80	-29	3.32	11.15	0.30	7.0	9	7	15

Climatological Data for December, 1915.

Stations.	Counties.	Elevation. Feet.	Length of record. years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.					Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	
Panhandle Division.																				
Bayard	Grant	2,700	12	27.2	−2.2	56	18 †	0	11	34	3.75	−0.45	0.96	21.6	15	4	9	18	w.	G. C. Dixon
Burlington	Mineral	875	20	32.0	−0.4	61	25	11	11	35	3.45	+0.79	1.70	5.0	5	0	21	10	nw.	J. W. Vandiver
Franklin	Pendleton		8																	William McCoy
Harpers Ferry	Jefferson	244	25								3.06	+0.36	0.96	3.1	6				w.	S. W. Lightner
Lost City	Hardy		8	31.1		54	24	12	11	26	3.21		1.05	6.0	6	8	7	16	n.	B. D. Hinegardner
Martinsburg	Berkeley	435	23	32.6	−0.4	58	25	19	16 †	28	3.20	+0.52	0.98	2.0	5	13	11	7	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20								2.45	+0.17	0.85	T.	4	12	17	2		M. S. Henkel
Piedmont	Mineral	919	0	31.4		57	25	12	11 †	29	2.83		1.12	0.7	8	1[a]	8[a]	18[a]	nw.	C. A. Suter, Jr
Romney	Hampshire	824	17	33.0	+1.1	58	26	11	22	43	3.44	+1.00	1.19	3.0	7	2	20	9	w.	Geo. E. Arnold
Upper Tract	Pendleton	1,230	15	31.5	−2.5	56	25	8	11	30	1.35	−1.11	0.45		5	4	21	6	w.	J. M. Mallow
Averages and	Extremes			31.3	−0.9	61	25	0	11	43	2.97	+0.18	1.70	5.2	7	6	14	11	w.	
Northern Division.																				
Bens Run	Pleasants	622	13	34.6	+1.5	58	17 †	17	15	26	5.29	+1.38	1.75	8.0	12	13	6	12		J. D. Riggs
Brandonville	Preston	1,809	1								4.15		1.16	6.5	5					W. T. Miller
Buckhannon	Upshur	1,411	24	32.8	−0.2	61	17	11	1 †	34	4.41	+0.25	1.05	10.0	11	4	10	17		H. A. Darnall
Cairo	Ritchie	674	12	34.5	+0.5	60	25	16	11 †	28	5.81	+2.09	1.65	4.0	14	4	3[a]	22[a]		Van A. Zevely
Central Station	Doddridge	950	12	32.6[c]	−0.4	64[c]	23	13[c]	1	39						3[b]	5[b]	21	sw.	D. H. Doak
Cheat Bridge											2.92		0.55	11.6	11					
Cortland	Tucker	3,300	1								3.36		0.98	7.0	7					Samuel Harmon
Creston	Wirt	701	13	34.6	+0.5	61	17	15	1 †	29	4.54	−1.42	1.30	2.8	14	6	1	24	w.	J. M. Reed
Davis	Tucker	3,093	7								5.85		0.90	29.5	17	2	1	28	sw.	Ross C. Male
Elizabeth	Wirt	646	4								5.29		1.53		14					E. D. Ball
Elkins	Randolph	1,940	15	30.1	−2.4	57	25	2	11	35	4.04	+0.62	0.92	12.9	18	0	6	25	w.	U. S. Weather Bureau
Fairmont	Marion	883	22	32.0[a]	−1.8	61[a]	25	13	16	40[a]	4.78	+1.39	1.28	4.0	14	9	7	15	w.	F. P. Ball
Glenville	Gilmer	738	25	35.6	+0.7	64	17 †	14	6	35	5.00	−1.36	1.30	1.5	13	3	2	26	w.	M. T. Brannon
Grafton	Taylor	1,000	22	35.0	−0.9	65	18 †	14	11	37	5.06	+1.49	1.26	7.0	14	6	4	21	w.	Joseph Gerken
Lost Creek	Harrison	1,026	18	33.5	+0.4	62	17 †	9	24 †	37	4.09	+0.58	1.48	5.5	11	7	5	19	w.	Allen Smith
Mannington	Marion	974	12	32.8	+0.1	61	18 †	8	15	31	5.21	−1.74	1.56	7.4	15	1	6	24	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	40	32.8	−1.3	61	17 †	12	16	33	4.43	−1.24	1.55	7.0	14	6[a]	2[a]	22[a]	sw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	12	33.8	+0.1	61	17	9	16	41	3.17	+0.20	1.47	6.0	6	5	0	26	sw.	M. Z. White
New Cumberland	Hancock	987	15	29.8[b]	−1.3	58[b]	17	8	16	30[b]	4.20	+1.01	1.90	9.8	8	2	16	13	nw.	M. F. Smith
New Martinsville	Wetzel	634	21	35.8	+1.0	65	17	17	15	32	5.52	+1.98	1.72	T.	12	4	2	25	n.	Wm. Ankrom
Parkersburg	Wood	638	26	34.2	−1.1	58	17	18	15	26	5.24	+2.47	1.65	4.9	14	1	9	21	w.	U. S. Weather Bureau
Parsons	Tucker	1,656	15	29.7	−1.7	62	25	1	12	37	3.87	−0.11	1.19	15.5	11	3	3	25		J. W. Swisher
Philippi	Barbour	1,149	22	35.2	0	67	18	12	11	39	5.33	+1.28	1.80	12.5	10	7	9	15	w.	Okey L. Robison
Pickens[d]	Randolph	2,697	24	30.1	−2.3	53	18 †	6	11	34	7.19	+2.13	1.40	22.0	14	7	5	18	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	29								5.48	+0.39	1.38	7.6	19				w.	F. R. Proudfoot
Saint Marys	Pleasants	577	7								5.36		1.32	T	12				e.	J. O. Goodman
Smithfield	Wetzel	835	10	32.5		66	17	11	1 †	43	6.54	+2.58	1.62	10.5	18	3	11	17	nw.	G. M. Whisler
Terra Alta	Preston	2,612	14	27.0[b]	−3.8	48	2	0	5[b]	11	32	6.11	+0.50	1.40	13.5	14	7	5	19	w.
Wellsburg	Brooke	1,225	20	30.0	−0.7	56	17 †	13	15	26	3.92	+0.94	1.30	13.5	10	1	7	23	sw.	C. P. Waugh
Weston	Lewis	1,026	26	33.2	−1.9	62	25 †	12	14 †	38	3.90	+0.19	1.06	14.2	13	4	5	21	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	33.3		58	17 †	12	11 †	42	4.51	+1.07	1.00	5.6	17	7	4	20	s.	Miss M. B. Forsyth
Averages and	Extremes			32.7	−0.7	67	18	0	11	43	4.82	+1.27	1.90	9.2	13	5	5	21	w.	
Southern Division.																				
Bancroft	Putnam	574	11	34.6	−1.0	65	17	12	15	40	4.85	+2.07	1.48	2.4	13	12	1	18	ne.	R. E. Dent
Beckley	Raleigh	2,440	15						9	16			4.00	+0.88	1.63	10.0	8	4	11	16	w.	John A. Ewart
Bluefield	Mercer	2,558	20	35.3	+0.3	59	18 †	15	15	34	1.90	−0.89	0.95	3.0	4	13	2	14		Norfolk & Western Ry.
Charleston	Kanawha	597	29	37.8	−2.1	68	17	14	15 †	43	4.66	+1.41	1.50	9.2	12	4	0	27	w.	C. V. Lewis
Clay	Clay	706	0																	Prof. E. B. Knabenshue
Cuba[b]	Jackson	650	14	34.1	+0.2	57	18	13	1 †	30	4.29	+0.86	1.12	2.0	8	2	11	18	nw.	C. T. Perry
Dam 22 O. R.	Jackson	538									1.90		1.10	1.0	10				w.	U. S. Engineer Office
Dunlow	Wayne	703	7																	George Damron
Elkhorn	McDowell	1,933	22	36.8	+0.5	63	17 †	16	20	31	4.35	+1.24	1.22	13.1	9	3	14	14	w.	J. J. Lincoln
Evans	Jackson	666	0								4.09		0.98	0.5	16	6	1	24		B. F. Sayre
Green Sulphur Spgs	Summers	1,600	19	32.3	−1.6	59	25	3	15	38	3.22	+0.68	0.90	11.5	9	7	13	11	n.	W. H. Gwinn
Hinton	do	1,450	25	33.2	−2.6	57	25	12	15	33	3.55	+0.55	1.14	6.5	10	8	2	21	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	2	31.8		58	17 †	8	1	35	3.45			25.0	13	4	3	21		R. E. Ferguson
Huntington	Cabell	538	19	35.0	−0.7	65	17	18	16	37	6.22	+3.24	1.80	2.0	11	7	0	24	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	14	30.8	1.8	51	25	10	15	33	2.92	−0.01	1.08	5.5	8	7	6	18	nw.	Geo. T. Argabrite
Logan	Logan	687	12																	W. H. Oliver, Jr
Madison	Boone	704	9																	S. E. Bradley
Marlinton	Pocahontas	2,131	18	26.6	−3.3	50	25	2	15	38	4.18	+0.39	1.15	7.0	12	2	21	8	nw	S. L. Brown
Nuttallburg	Fayette	2,252	22																	Miss Donna Tully
Point Pleasant	Mason	553	24	35.0	−0.2	64	17	13	15	35	5.87	+2.75	1.72	2.0	16	5	5	21	ne.	W. D. Holmes
Powellton	Fayette	933	17	39.6	−0.6	68[c]	18	10[c]	15	39[c]	4.00	+1.05	1.05		4	4[c]	9	14		S. C. Lampert
Robertsburg	Putnam	574	14	32.8	1.8	68	17	12	15 †	43	4.89	1.52	1.23	2.0	11	3	2	26		E. C. Brace, Jr
Ryan	Roane	709	11	34.2	+0.1	62	29	10	15	33	5.30	+1.84	1.36	6.0	16	5	8	18		Wm. E. Ryan
Spencer	do	784	16	32.6		61	24	7	15	40	5.69	+2.45	1.40	17.4	11	1	8	22		A. M. McKown
Sutton	Braxton	839	11																	Ben Gillespie
Union	Monroe	2,250	10	31.1[a]	−0.8	58[c]	17	10	27	44[a]	1.09	−0.72	0.90	7.0	4					J. C. Shanklin
White Sulphur Springs	Greenbrier	1,940	5	31.0		54	29	9	7	40	4.23		1.60	7.0	6	6	3	22	sw.	J. M. Ayres
Williamson	Mingo	660	13	37.4	+0.2	68	17	18	15	35	5.53	+1.72	1.53	3.5	12	8	7	16	w.	J. F. Keyser
Averages and	Extremes			33.6	−0.8	68	12 †	2	15	44	4.28	+1.20	1.90	6.5	10	6	6	19	w.	
State Averages and	Extremes			32.8	−0.8	68	12 †	0	11	44	4.55	+1.09	1.90	7.7	11	5	7	9	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for De ember, 1915.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac	T.	.05	.02	.13		.03		.02	.24	.13			.13	.16			.96	.63	T.		T.		T.	T.	.19	.23		.20	.64	T.		3.75
Burlington	do									T.			.10		.20			1.25								.20			1.70			3.45
Franklin	do																																
Harpers Ferry	do												.20					.22	.85										.96		T.	.61	.22	3.06
Lost City	do									T	T.			.20				.45	.30							.81	.40		1.05				3.21
Martinsburg	do													.20				*	1.38					T.		.65				.98			3.21
Moorefield	do									T.				T.	T.			.60	.48								.52			.85			2.45
Piedmont	do		T				T.	T.	.04	T.				.06	.02	T.		.98	.43	T.					T.	.07	.11			1.12			2.83
Romney	do													.10				.85	.60							.50	.20			.50	.69		3.44
Upper Tract			T.								T.		T.	T.	T.			.28	.30	T.						.17	.15		T.	.45			1.35
Northern Division.																																	
Bens Run	Ohio		.14	.05						.03			.05	.32				1.75	.90							.03		.58	.06		.38	1.00		5.29
Brandonville	Monongahela															.65		.75	1.16											.57	1.02			4.15
Buckhannon	do		T	.10			T.		T.	.10				.10	.10		.10	.85	.90					T	T.	.45	.30		.36	1.05			4.11
Cairo	Little Kanawha	.18	.04	.10						.12			.07	.15	.05			1.65	1.25							.32	.15		.80	.90	.03		5.81
Central Station	Middle Is. Creek																																
Cheat Bridge			.05	.06			.10			.25					.20		.46		.05							.20	.45			.95	.15		2.92
Cortland	Monongahela													.50	.40			.98	.55											.36	.50	.33	3.36
Creston	Little Kanawha		.28	T.	T.		T.		.02	T.	.01		.01	.55	.05	.03		.95	1.30	T.				.02	T.		.40		.10	.82	.20		4.54
Davis	Monongahela	.30	T.	T.	.05		.05	T.	.05	.30	.25	T.		.15	.40	.40		.90	.97	.45					T.	.30	.90		.20	.60	T.	.05	5.85
Elizabeth	Little Kanawha	.12	.04		.02				.04					.48	.42			1.12	1.55	.01							.20		.32	1.00	.34	.03	5.29
Elkins ***	Monongahela		.03	.01	T.	.02	.01		.10	.25	T.	.01	.04	.39	.07	T.	.44	.53	.70	T.	T.	T.		T.		.60	.03		.09	.71	.01		4.04
Fairmont	do	T.	.13	T.	.03		T.		.08	.03	T.			.25	.02	.01		1.14	1.28	.10	T.				T.		T.	.35		.10	.89	.35	T.	4.78
Glenville	Little Kanawha		.19	.02		.05			.60	1.06			.04	.45	.05			.80	1.30	T.						.45	T.		.25	.82			5.06
Grafton	Monongahela		T.	T.					*	.07			.04	.10	.12	.28		1.26	.80	.11						.20	.70		.33	1.00	.05		5.06
Lost Creek	do		.03	T.	T.				.09	.03			T.	.09	.05			1.15	.61	T.				T.	T.	.24	.18		.14	1.18			4.09
Mannington	do	T.	.20	T.	.03		T.		.05	.08			T.	.35	.02	.05		1.56	1.08		.02			.01	T.	.27	.21		.36	.94	T.		5.21
Morgantown	do		.05	T.	.05				.10	.10				.15	.15			1.35	1.00					.01		.20	.23		.35	.68	.01		4.43
Moundsville	Ohio		T	T.			T.			.05				T.	.10			1.47	.05							T.			.10	1.10			3.17
New Cumberland	do	T.	T.		.01				T.	T.			T.	.05				1.02	.30					.32		.40		.20	1.90				4.20
New Martinsville	do		.20	T.	.05				T.	.05				.40	T.		.05	1.72	.88	T.	T.					.16	.17	.18	.62	1.04			5.52
Parkersburg ***	Ohio	.05	T.	.01		T.			.01	T.		.02	.22	.18	T.		.57	1.56	.66	T.				.02	T.	.67	T.	.02	.29	.96	T.		5.24
Parsons	Monongahela		T	T.		.05			.05	.30	.05			.20	.30		T	.35		T.						.23	.60		.55	T.		1.19	3.87
Philippi	do		T.							.10				.20	.25			1.80	.84							.25	.30		.40	1.15	.04		5.33
Pickens	do		.10	.20		T.	.10		.10	.40				.60	.70		.01	1.40	.80							.75	.40		.22	.51			7.19
Rowlesburg	do	.02	.08		.06			.02	.06	.08	.08			.20	.28	.12		1.38	.86	.22						.02	.60		.02	.86	.48	.04	5.48
Saint Marys	Ohio		.05							.02				.50	.06			1.32	1.23	.28	T.					.05	.60		.30	1.00	.15		5.56
Smithfield	Fishing Creek	.10	.15	T.	.10		T.	.05	.18	.08			.07	.30	.20	.10		1.53	1.27	.11	T.				T	.06		.60		1.40	.22		.02	6.54
Terra Alta	Monongahela	.08	T.	T.			08		.11	.12		.05		.08	.35	.30	1.00	1.10			T.	.03	.06						1.25	1.00	T	T.	6.11
Wellsburg	Ohio		.05	T.						.05				.30	.10			.50	.80		T.				T.	.32	.20		.30	1.30			3.52
Weston	Monongahela	.06	.04	T.			T.		.10	.10				.30	.06	.20			.90	.30					T.	.60		.24	.82	.18			3.90
Wheeling	Ohio		.04	.01	.01	T.	T		T.	.02	T.		.04	.24	.05	.04		.80	1.00	.40	T.	T.			,01	.12	.44		.28	.72	.62	T	4.51
Southern Division.																																	
Bancroft	Great Kanawha		.29							.05				.36	.02		.14	.73	1.48							.05			.42	.04	.24	.93	.10	4.85
Beckley	do									.10			.20	.42	.20		.17												1.63		.38	.60		4.00
Bluefield	do												.30				.50														.15	.95		1.90
Charleston	do		.10	T.					T	T.	T.		.08	.40	.10		.06	.62	1.50	.10					T.		T.	.56		.10	.90	.14		4.66
Clay	do																																
Cuba	Sand Creek	T.	T.	T.									T.	.10	T.		.25	.95	1.12					T.	.10	.44	T.		.50	.83			4.29
Dam 22 O. R.	Ohio		.16	T.	T.					T.	T.		.08	.36	T.		.02	.92	1.40	T.				T		.55		.38	.95	.15			4.97
Dunlow	Big Sandy																																
Elkhorn	do	T.										.42	.20	.29	.15		1.22		.55							.72				.14	.60		4.35
Evans	Ohio		.20	T.			T.			.03		.10	.36				.25	.96	T.							.60		.05	.56	.98			4.09
Green Sulphur Spgs.	Great Kanawha									.10			.20	.15	.20			.30								.45	.50			.42	.90			5.22
Hinton	do		T.	T.							T.		.32	.04	.03		.20	.40	.62	.08				T.	T.		.52			1.10	.04		3.35
Holcomb	do		*	.18					T.	*	.17		*	*	.60		*	*	1.15					T.		.60			*	.75			3.45
Huntington	Ohio	T.	.16									T.	.16	.30	.14		T.	1.22	1.90					.02		.30	.50		.40	1.12			6.22
Lewisburg	Great Kanawha									T.		T.	.05	.20	.10		.48	.44	T.					T.	T	.37	.20			1.08			2.92
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do	.10	T.	T.		T.				.10		T.	.10	.10	.10		.30	.25	1.15							.44	.20		.22	1.12			4.18
Nuttallburg	do																																
Point Pleasant	Ohio		.15		.02					.03			.08	.32	.06		.02	1.20	1.72					.02		.08	.50	.04	.48	1.05	.10		5.87
Powellton	Great Kanawha																1.05	.95									1.00	1.00					4.00
Robertsburg	do	T.	.17							.05				.40	.05			.90	1.23	T.						.50	.05		.37	1.04	.08		4.89
Ryan	do	T.	.21	.01					.01	.02			.08	.10	.02	T.		.04	.82	1.36					.04	.03	.62	.24		.59	1.16			5.30
Spencer	Little Kanawha	T.		T.						T.			T.	.15	.28	.28	.20	.85	1.40								.36	.41	.84	.70	.22		5.69
Sutton	Great Kanawha																																
Union	do			T.	T.							.40				T.		.40								.20				.90			1.90
White Sulphur Spgs.	do														.30		T.	1.00	1.60							.56			.33	.64			4.43
Williamson	Big Sandy	T.	.02										T.	.44	.20	.10		.62	.64	1.53	T.					.02			.64		.10	1.20	.02	5.53

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

+++ Probably incomplete.

Daily Temperatures for December, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Division.																																	
Bayard	Maximum	33	34	30	26	29	27	30	38	39	23	23	30	31	26	16	34	48	56	32	33	28	40	44	14	56	44	54	46	38	37	39	35.7
	Minimum	14	26	18	17	9	18	18	24	19	18	0	17	21	10	8	6	22	22	20	16	9	12	20	29	33	20	20	36	28	29	29	18.7
Burlington	Maximum	39	42	38	39	34	36	39	52	42	36	32	35	39	35	29	34	35	41	41	36	37	44	48	48	61	37	48	50	43	44	42	41.5
	Minimum	18	25	19	23	23	27	19	25	26	25	11	27	26	20	19	12	29	31	30	24	20	17	15	29	26	21	15	33	32	30	29	23.1
Martinsburg§	Maximum	41	45	36	37	35	38	42	51	40	34	33	33	39	29	31	35	42	43	41	34	35	42	45	48	58	37	43	46	42	42	43	40.0
	Minimum	22	22	34	24	20	28	27	29	31	26	20	20	26	28	21	19	22	32	31	28	20	19	21	23	30	31	29	22	33	32	30	25.2
Piedmont	Maximum	40	37	35	36	37	32	37	47	40	30	31	34	35	32	27	33	36	38	38	37	37	42	44	45	57	34	43	46	41	41	42	38.2
	Minimum	20	30	20	25	23	24	28	26	30	22	12	25	25	19	15	12	28	32	27	24	20	19	20	35	39	25	14	35	31	31	33	24.5
Romney	Maximum	40	46	38	41	35	39	43	53	47	31	32	34	38	40	30	29	39	42	42	40	40	46	48	49	48	58	56	50	49	48	45	42.5
	Minimum	18	27	27	23	25	26	24	25	24	24	12	21	25	23	12	12	16	32	30	26	20	11	17	31	27	26	13	37	32	31	33	25.5
Upper Tract	Maximum	43	41	36	36	36	33	36	36	33	30	32	34	35	33	27	36	40	55	39	37	36	48	52	49	56	42	50	50	48	44	48	40.4
	Minimum	16	29	21	20	14	23	20	14	23	22	8	20	29	19	18	17	27	30	25	25	14	18	25	27	39	27	24	28	31	30	27	22.6
Northern Division.																																	
Bens Run	Maximum	39	39	35	39	36	36	42	48	36	37	35	40	40	33	29	37	58	54	38	34	39	46	52	51	58	34	47	45	46	40	51	41.7
	Minimum	20	33	25	22	24	33	31	32	30	23	19	32	31	22	17	20	34	29	29	22	21	27	30	36	32	26	21	32	33	33	33	27.5
Buckhannon	Maximum	38	38	36	33	33	30	35	45	35	51	35	43	40	25	25	39	61	58	35	35	35	45	49	45	60	33	45	49	53	39	49	41.0
	Minimum	11	32	24	21	20	25	27	28	28	22	12	22	21	19	16	19	35	28	28	18	25	20	28	28	33	24	11	37	35	33	36	24.7
Creston	Maximum	40	42	35	41	38	34	44	50	45	39	36	40	40	33	32	37	61	60	40	37	40	49	53	50	59	34	44	47	52	41	50	43.3
	Minimum	15	33	22	21	17	20	27	28	32	23	15	32	32	22	17	24	33	31	30	22	19	20	27	26	31	28	17	35	35	34	35	25.9
Elkins	Maximum	37	34	31	33	33	26	37	44	29	27	31	40	36	27	21	37	56	55	35	29	35	47	49	50	57	30	45	48	50	35	50	38.5
	Minimum	10	22	23	18	14	24	25	29	20	10	2	31	26	14	14	14	33	25	25	22	18	17	25	33	28	12	10	36	31	31	32	21.7
Fairmont§	Maximum	39	38	34	40	34	32	39	46	33	35	34	43	33	22	31	51	60	34	36	31	39	50	53	54	61	30	50	41	49	35	..	40.2
	Minimum	17	22	24	19	20	24	26	29	31	23	15	17	31	21	14	13	20	34	27	22	17	20	24	34	31	24	16	27	31	31	31	23.7
Glenville	Maximum	41	39	36	42	36	35	45	51	46	40	31	41	41	33	35	38	64	61	41	38	43	52	55	54	54	40	45	52	54	44	53	44.5
	Minimum	15	33	24	24	18	14	29	29	31	25	15	24	32	19	22	22	33	29	29	24	23	29	38	39	30	28	18	35	39	28	36	26.8
Grafton	Maximum	38	40	36	38	35	33	39	38	45	46	40	42	44	41	30	44	60	65	37	40	40	65	55	54	60	38	45	58	58	45	52	44.9
	Minimum	15	33	25	18	19	25	29	15	28	28	14	30	29	19	16	19	30	30	23	23	18	28	28	36	35	25	15	33	27	32	34	25.2
Lost Creek	Maximum	38	40	33	39	34	32	41	48	42	37	35	45	40	31	27	36	62	62	38	35	39	51	53	48	60	33	46	50	54	43	51	42.7
	Minimum	10	32	25	15	17	23	28	29	29	19	12	30	30	18	16	18	35	29	28	22	9	18	30	32	29	27	9	36	33	33	34	24.3
Mannington	Maximum	37	39	33	36	33	31	37	47	41	34	32	39	39	30	28	38	60	61	36	35	38	47	53	49	61	34	44	50	47	40	45	41.3
	Minimum	13	31	22	17	19	24	29	29	29	22	13	28	29	21	8	10	33	30	28	22	16	22	24	36	30	22	14	33	32	32	34	24.3
Morgantown	Maximum	37	37	33	34	41	30	33	44	41	28	41	38	38	29	25	35	61	61	34	34	34	47	59	48	61	38	33	49	46	40	44	40.5
	Minimum	20	31	23	20	21	24	28	28	26	22	14	27	28	17	14	12	33	28	26	21	17	28	31	34	37	23	23	30	30	29	31	25.0
New Cumberland	Maximum	37	37	32	34	32	34	35	41	34	31	30	37	37	32	28	32	58	55	33	30	36	45	48	42	55	..	39	..	32	30	39	37.4
	Minimum	18	28	15	13	25	22	28	28	23	21	14	22	26	17	12	8	28	28	24	18	18	23	31	29	30	20	20	27	22	23	27	22.2
New Martinsville	Maximum	42	45	42	44	39	39	45	51	51	38	40	46	47	42	32	40	65	54	39	35	40	47	53	43	61	38	44	45	49	39	50	44.7
	Minimum	19	33	24	20	23	27	31	32	29	25	18	30	31	21	17	18	33	30	29	23	19	26	29	37	33	27	22	32	32	32	33	26.9
Parkersburg	Maximum	39	37	32	36	35	34	40	47	35	33	34	40	36	29	29	37	58	40	37	28	40	48	54	45	58	32	51	47	47	38	48	40.1
	Minimum	23	32	27	25	24	26	32	33	27	23	22	31	29	21	18	24	36	29	27	22	22	30	37	35	32	26	25	31	34	33	37	28.2
Parsons	Maximum	36	36	32	35	34	29	37	45	37	28	32	37	37	27	22	35	52	45	35	33	35	18	48	42	62	43	35	42	45	35	49	38.3
	Minimum	11	26	22	20	12	24	26	25	25	19	1	25	25	16	5	5	32	26	26	21	20	15	21	32	33	6	20	20	30	31	33	23.1
Philippi	Maximum	39	41	34	32	32	31	38	53	38	31	38	43	41	32	28	38	63	67	37	41	37	50	54	46	63	39	40	50	54	43	48	42.6
	Minimum	18	29	26	18	18	15	29	31	26	23	12	31	30	18	14	14	33	28	22	14	17	15	34	32	25	27	30	33	32	33	33	25.9
Pickens	Maximum	35	34	28	44	31	34	40	44	30	29	40	41	35	27	29	42	47	53	36	36	..	48	42	45	53	32	42	44	50	47	49	39.7
	Minimum	8	14	16	14	12	20	20	29	20	10	6	32	22	12	10	11	42	23	22	15	..	20	25	26	27	19	18	34	37	28	29	20.5
Terra Alta	Maximum	45	48	40	34	30	31	32	35	40	38	32	35	33	30	33	41	40	38	30	29	33	29	32	34	35	36	40	40	38	34	33	35.4
	Minimum	19	20	25	14	12	14	18	20	21	14	9	8	..	..	12	14	32	20	18	17	20	14	18	21	18	22	30	30	28	20	22	18.7
Wellsburg	Maximum	36	34	30	32	31	30	34	41	32	28	28	38	35	27	23	31	56	54	33	30	32	32	45	40	56	32	41	40	38	31	31	34.2
	Minimum	19	26	20	15	27	22	29	29	25	21	16	24	27	18	13	14	30	29	25	20	17	23	33	32	32	21	21	29	27	25	41	23.9
Weston§	Maximum	42	43	36	26	28	34	40	48	54	35	38	36	32	34	..	34	32	38	34	36	43	50	52	60	62	56	50	52	62	50	56	42.4
	Minimum	15	24	26	24	18	20	24	30	32	20	15	28	30	12	14	..	20	18	20	16	18	20	24	26	34	36	12	30	34	36	32	24.0
Wheeling§	Maximum	40	45	35	41	36	34	42	47	37	39	39	41	33	26	33	57	58	36	39	28	41	50	55	56	58	37	48	27	41	35	43	41.5
	Minimum	22	25	21	19	18	25	28	32	34	24	12	12	33	24	15	15	20	32	28	22	20	24	30	36	36	25	24	32	32	29	30	25.1
Southern Division.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum	12	25	23	22	24	23	15	20	20	18	30	29	26	22	20	9	40	31	29	29	24	28	30	29	40	11	38	31	40	31	52	26.0
Bluefield	Maximum	44	49	44	42	42	39	45	45	41	37	34	36	37	27	31	40	58	59	58	45	38	45	51	55	..	..	..	52	47	55	38	59	44.9
	Minimum	18	30	26	26	27	22	16	32	35	20	20	24	24	21	15	25	33	28	24	25	21	26	33	25	..	..	23	39	35	32	30	26.0
Charleston	Maximum	51	45	42	40	40	38	41	51	49	50	50	43	43	39	35	36	68	65	65	62	47	50	56	58	54	51	51	49	51	49	53	49.1
	Minimum	20	23	29	25	26	25	25	24	34	25	21	27	33	26	14	14	25	34	28	28	23	22	25	29	30	29	23	37	28	36	36	26.6
Elkhorn	Maximum	43	41	37	40	43	39	43	47	45	36	37	36	35	30	31	39	63	63	39	39	38	46	52	55	58	47	52	51	55	40	58	44.5
	Minimum	19	35	29	30	29	27	20	32	31	25	28	28	30	27	18	30	39	32	31	16	27	28	32	34	31	26	24	37	40	37	31	29.2
Green Sulphur Spgs.	Maximum	39	39	35	42	41	37	44	49	43	36	35	39	35	29	33	35	55	56	39	36	38	47	52	50	59	38	40	40	54	44	55	42.4
	Minimum	12	27	22	17	20	25	12	24	27	14	20	24	24	20	3	23	30	29	27	22	21	19	19	25	21	24	12	24	35	33	33	22.2
Hinton§	Maximum	39	40	38	44	42	38	44	51	34	38	37	37	36	28	31	35	48	37	42	34	42	48	54	55	57	38	41	46	53	40	53	42.0
	Minimum	16	20	25	26	23	24	15	18	32	23	17	24	27	26	12	15	29	31	29	26	24	23	22	27	30	27	21	23	31	35	35	24.4
Holcomb§	Maximum	42	39	32	38	36	43	48	29	34	44	40	31	21	34	37	58	46	40	30	39	50	52	57	48	40	42	48	52	58	56	42	42.0
	Minimum	8	16	14	18	13	18	20	26	27	19	9	22	20	18	12	14	23	31	28	23	22	19	22	22	30	31	13	28	34	31	40	21.6
Huntington§	Maximum	45	41	37	39	39	35	41	49	38	35	35	43	35	29	29	51	65	34	39	32	40	48	51	58	46	42	50	44	48	43	55	42.3
	Minimum	24	30	27	27	26	25	23	23	35	22	22	26	22	26	19	18	28	32	31	26	21	21	33	34	35	30	26	37	34	35	35	27.3
Lewisburg	Maximum	36	36	33	38	36	40	41	46	39	32	33	35	33	28	28	32	40	39	39	35	37	45	50	47	54	36	39	43	50	44	48	39.1
	Minimum	12	25	25	19	20	21	11	26	27	20	13	22	27	20	10	22	32	29	27	24	21	19	20	31	33	24	18	10	29	32	32	22.6
Madison§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marlinton	Maximum	26	32	28	32	30	26	34	40	32	26	30	32	30	24	24	30	40	40	32	30	32	38	44	40	50	30	36	36	46	40	44	34.4
	Minimum	6	22	18	12	12	20	10	24	22	16	6	12	24	12	2	20	30	28	22	24	18	16	16	26	28	20	10	24	34	30	28	19.1
Point Pleasant	Maximum	41	41	36	42	37	38	45	53	45	39	37	40	41	33	32	35	64	54	40	36	44	51	56	48	58	52	50	54	46	47	51	44.7
	Minimum	19	31	22	23	18	19	24	30	29	19	18	29	30	22	13	24	31	27	27	20	17	25	32	22	27	26	30	30	31	32	35	25.5
Powellton	Maximum	42	43	37	41	38	35	41	49	38	34	40	43	41	32	34	38	47	68	57	50	39	..	..	..	60	62	44	45	47	58	52	48.3
	Minimum	18	34	29	25	22	26	22	31	32	25	19	34	31	24	19	25	30	36	32	28	23	..	..	..	26	23	37	35	36	32	38	28.9
Robertsburg§	Maximum	43	40	35	43	39	35	44	40	35	38	36	40	34	25	30	47	68	33	40	30	34	50	55	60	56	39	50	46	50	42	52	42.6
	Minimum	18	24	21	23	19	18	19	26	29	18	17	26	30	23	12	12	25	30	28	22	17	17	26	24	28	26	19	34	42	34	32	23.8
Ryan	Maximum	41	44	31	42	36	44	50	55	46	44	39	40	59	30	43	37	57	56	40	36	40	51	55	50	56	52	46	45	62	40	52	44.4
	Minimum	14	30	28	20	15	16	23	27	30	17	15	29	30	21	10	23	32	29	29	21	18	18	25	22	32	20	13	35	34	33	32	23.4
Spencer§	Maximum	44	33	31	40	35	32	50	52	31	33	37	40	32	25	32	52	48	34	44	30	44	50	54	61	56	30	49	48	52	54	51	41.4
	Minimum	15	22	21	20	15	18	25	27	31	21	13	17	32	22	7	22	32	32	28	28	20	20	25	28	36	27	9	30	35	35	34	24.1
Union§	Maximum	39	38	35	42	40	35	46	52	52	34	34	37	33	25	33	36	58	40	37	40	38	46	54	57	55	30	45	50	55	38	..	40.9
	Minimum	15	20	25	18	23	22	14	12	50	19	16	22	21	23	11	11	14	33	27	29	27	20	21	28	32	23	10	13	19	33	33	21.1
White Sulphur Spgs.	Maximum	32	37	30	42	37	30	50	46	42	36	32	33	34	34	30	33	44	44	40	42	44	44	47	47	42	40	52	39	54	42	50	39.7
	Minimum	13	25	26	25	21	19	9	18	26	21	13	24	24	21	13	21	30	38	21	27	19	23	23	26	21	21	12	24	31	33	31	22.3
Williamson§	Maximum	46	44	38	45	42	39	43	50	36	40	41	42	35	33	33	54	68	35	45	36	44	51	60	62	61	38	45	55	60	42	58	45.7
	Minimum	23	25	29	29	28	25	21	22	35	25	26	33	33	29	18	20	33	35	33	28	21	23	29	32	34	30	28	33	40	39	36	28.8

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
O'B

VE Slack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
Charles F. Marvin, Chief

ANNUAL SUMMARY, 1915

WEST VIRGINIA SECTION

OF THE

CLIMATOLOGICAL SERVICE

HENRY C. HOWE
SECTION DIRECTOR



PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MARCH 6, 1916

MEAN ANNUAL ISOTHERMS AND PREVAILING WINDS. 1915.



U. S. DEPARTMENT OF AGRICULTURE,

CLIMATOLOGICAL SERVICE

OF THE

WEATHER BUREAU.

CENTRAL OFFICE: WASHINGTON, D. C.

WEST VIRGINIA SECTION,

HENRY C. HOWE, Section Director.

ANNUAL SUMMARY No. XXII. 1915.

GENERAL SUMMARY.

The average temperature for the State was 52.8°, or normal as compared with the average for 25 years. During the growing season, or from May 1 to September 1, the monthly averages were continuously below the normal, while the fall months were warm and favorable for late and retarded crops. January was somewhat colder than usual, February was abnormally warm, the third month was the coldest March of record, and the average April temperature was 3.7° above the normal. In most of the agricultural districts the season of growth extended from near the close of the second decade in April until October 9, nearly two weeks longer than usual. The cold weather in March checked an unseasonable fruit bloom, while the unusually warm April and September, preceding and following a cool summer, were especially favorable for early and late growth.

The average precipitation was 43.76 inches, while the State average for the past 25 years is 42.04 inches. Excepting January and May, the precipitation was deficient until August, while the last five months were considerably wetter than usual. March was especially dry, but nearly a normal rainfall was received in July. There was no drought. Too much rain fell during the harvesting season. Heavy rain, falling on frozen ground, high temperatures, and melted snow caused a moderate flood in the district early in February.

The average cloudiness was considerably above the normal. The sunshine at Parkersburg averaged 45 per cent. of the possible amount, and at Elkins 43 per cent.

The wind movement at Parkersburg was 46,473 miles, and at Elkins 34,098 miles.

THE WEATHER BY MONTHS.

January.—January was exceptionally wet and slightly colder than usual, with practically a normal snowfall, and the precipitation was well distributed. For a winter month the temperature was exceptionally uniform. Readings below zero occurred at only seven stations, and higher temperatures occurred in January during 20 of the past 24 years. As the cold wave of 20th lost much of its energy before reaching the eastern portion of the State, a reading below zero was not recorded in the mountain or eastern counties. In most sections the ground was protected by snow during the cold periods. The highest temperatures occurred on the 5-6th and 16-17th and the lowest on the 1st, 22d, and 29th.

February.—The average temperature was the highest of record for February, except in 1909. Although abnormally warm the highest reading recorded was only 72°. Readings below zero occurred at only three stations. The precipitation was slightly below the normal and was received mostly as rain, the snowfall being the lightest of record for February, except in 1909. The highest temperatures occurred generally on the 13-14th and 21st-22d and the lowest in nearly all sections on the 10th. Heavy rain, high temperature, and melted snow caused a moderate flood in the district. The following crest stages occurred: Wheeling and Parkersburg, 42.2 feet; Point Pleasant, 49.8 feet; Huntington, 51.1 feet.

March.—With an average temperature of 34.4°, this was the coldest March of record. While the coldest of record, the month was free from unusually cold periods, the temperatures from day to day being exceptionally uniform. The highest recorded, 63°, was 12° lower than the State maximum for any previous March of record. The precipitation was also the lightest of record for March, except in 1893 and 1910. In most sections the temperatures were below freezing from 25 to 27 days. The conditions were favorable for fruit, but farm work was retarded by the unseasonably cold weather.

April.—In contrast with March, the month was the warmest April of record, except in 1906. Although the average was abnormally high, cool weather prevailed until the 19th, except a few days, and the season was about 10 days late at the close of the second decade. Record high temperatures for April were nearly equalled or exceeded during the middle of the last decade, when readings from 90° to 95° occurred in most sections. This was the third consecutive month with deficient precipitation and the amount received during March and April averaged less than one-half the normal; but the month closed with a favorable outlook for crops, owing to the high temperatures and good showers during the last decade of April.

May.—May was slightly cooler and somewhat wetter than usual, with a favorable rainfall distribution. Although averaging cool, there was practically no damage by frosts in the agricultural districts. The temperature fell to the freezing point at six stations during the first decade and at one station (Bayard) a reading of 32° was recorded on the 18th and 27th. Owing to protracted cool and rainy weather, crops were about 10 days late at the close of the month; but the outlook was generally favorable, especially for fruit.

June.—June was also cool, with the rainfall considerably deficient. The month was free from periods of exceptionally high temperature and the lowest readings of record for June occurred in nearly all sections on the 24th. While the season continued late, owing to cool weather, crops and pastures were in good conditions at the close of the month. Wheat, corn, oats, and potatoes were especially good, and the outlook for peaches favorable; but only a small yield of apples was expected.

July.—This month was characterized by frequent and unfavorably distributed rainfall, abnormally low temperature, and excessive cloudiness. Measurable amounts of precipitation were received on an average of 13 days and there were but two short periods of exceptionally warm weather. Crops, however, made rapid progress during the warmer periods of the month and the

wheat yield was large and the prospects good for corn, potatoes, peaches, and berries; but apples were scarce and the hay crop only fair. The conditions were unfavorable for harvesting.

August.—August was exceptionally cool. As a rule, the temperatures were deficient after the 4th, and the last week was the coolest of record for July and August in nearly all sections. Light frost formed in a few of the more elevated sections on the 19th and in some of the northern counties on the 31st, but practically no damaged resulted. Showers were frequent and unfavorably distributed, giving an averaged rainfall much above the normal. Notwithstanding the unfavorable weather corn, potatoes, buckwheat, and pastures were generally in excellent condition at the close of the month.

September.—The month was considerably warmer and much wetter than usual, with an excess of sunshine, making the conditions exceptionally favorable for maturing crops, which were about two weeks late at the close of August. The rainfall was well distributed. While frosts occurred in many sections from the 23d to the 29th, no material damage resulted, and a large yield of corn, potatoes, grain, and fruit was secured.

October.—This month was also sunshiny and considerably wetter than usual. Excessive rain, in many sections ranging from three to more than four inches, was received during the 24 hours ending late on the 1st, causing overflows in the streams, especially in the Little Kanawha basin, and a flood stage in the Little Kanawha river, and much corn and other crops on the bottom lands were washed away. Killing frosts were general on the 10th. After the 12th the weather was especially favorable for farm and other outdoor work. Pastures were generally in good condition at the close of the month.

November.—Like the previous two months, November was also sunshiny, warmer and wetter than usual. The amount of sunshine received was the greatest of record for November, except in 1910. The snowfall was unimportant, the first of the season occurring on the 15th. The conditions were exceptionally favorable for grazing and outdoor work.

December.—The average precipitation was 4.35 inches, the greatest of record for any December, except in 1901, 1902, 1906, and 1914. Although the snowfall was also slightly in excess, the ground was bare in the agricultural sections most of the month, and favorable conditions continued for grazing and outdoor work. The temperature averaged slightly below the normal. Heavy rains near the close of the second and third decades, falling on frozen ground, caused marked rises in the streams and rivers. A stage of 22 feet was reached at Glenville and 20.7 feet at Creston. The following crest stages were noted in the Ohio river on the 20th: Wheeling, 31.9 feet; Marietta, 29.7 feet; Parkersburg, 29.7 feet; Point Pleasant, 39.9 feet.

CORRECTIONS.

The following changes should be made in the monthly reports of the West Virginia Section for 1915:

March.—Make date of the highest temperature at Moundsville 13th.

April.—Make date of the lowest temperature at Moundsville 2d.

July.—Make date of the highest temperature at Union 19.

Dates on which First and Last Killing Frost Occurred or Minimum Temperature Fell to 32 Degrees.

Station.	Last in Spring.	First in Autumn.	Station.	Last in Spring.	First in Autumn.
Bancroft	April 18	Oct. 10	Martinsburg	April 16	Oct. 11
Bayard	May 27	Sept. 23	Morgantown	April 14	Oct. 11
Beckley	April 19	Oct. 10	Moundsville	April 18	Oct. 9
Bens Run	April 18	Oct. 10	New Cumberland		Sept. 29
Bluefield	April 19	Oct. 10	New Martinsville	April 18	Oct. 10
Buckhannon	April 18	Oct. 10	Nuttallburg	April 19	Oct. 9
Burlington	April 18	Oct. 10	Parkersburg	April 14	Oct. 10
Cairo	April 19	Oct. 10	Parsons	May 2	Oct. 10
Central Station	April 18		Philippi	April 18	Oct. 10
Charleston	April 15	Nov. 3	Piedmont		Oct. 10
Creston	April 18	Oct. 10	Pickens	April 18	Oct. 10
Cuba	April 18	Oct. 10	Point Pleasant	April 18	Oct. 10
Elkhorn	April 19	Oct. 10	Powellton	April 15	Oct. 10
Elkins	April 18	Oct. 10	Robertsburg	April 18	Oct. 9
Fairmont	April 18	Oct. 10	Romney	April 18	Oct. 10
Glenville	April 16	Oct. 10	Ryan	April 18	Oct. 9
Grafton	April 19	Oct. 10	Smithfield	May 10	Oct. 10
Green Sulphur Springs	April 19	Oct. 9	Spencer	April 14	Oct. 9
Hinton	April 19	Oct. 10	Sutton	April 19	Oct. 10
Holcomb	May 10	Oct. 9	Terra Alta		Oct. 9
Huntington	April 14	Oct. 10	Union	April 18	Oct. 9
Lewisburg	April 18	Oct. 9	Upper Tract	April 19	Oct. 10
Lost City		Oct. 11	Wellsburg	April 16	Oct. 9
Lost Creek	April 18	Oct. 10	Weston	April 16	Oct. 10
Madison	April 16		Wheeling	April 18	Oct. 10
Mannington	April 18	Oct. 10	White Sulphur Spgs		Oct. 9
Marlinton	May 10	Oct. 9	Williamson	April 14	Oct. 9

COMPARATIVE ANNUAL DATA FOR WEST VIRGINIA.

Year	Temperature			Precipitation
	Mean	Highest	Lowest	
1891	52.0	...	....	45.96
1892	52.1	99	−12	38.33
1893	52.0	99	−25	39.82
1894	53.5	103	−29	34.52
1895	51.5	107	−21	32.82
1896	53.6	97	−10	43.49
1897	53.5	103	−18	41.59
1898	54.8	103	−13	47.61
1899	53.2	100	−35	40.97
1900	54.1	104	−11	37.62
1901	52.1	104	−11	44.78
1902	52.8	104	−14	42.19
1903	52.0	105	−19	40.55
1904	50.9	98	−20	33.33
1905	52.3	100	−22	45.53
1906	54.0	101	−11	44.36
1907	51.7	98	−23	52.15
1908	53.7	101	−16	40.17
1909	53.0	101	−10	43.02
1910	52.3	98	−11	38.60
1911	54.6	106	− 5	47.13
1912	51.7	100	−34	43.78
1913	53.9	103	− 4	49.02
1914	52.3	106	−22	39.71
1915	52.8	101	− 8	43.76

TEMPERATURE AND PRECIPITATION FOR WEST VIRGINIA, 1915.

Month	Temperature in degrees Fahrenheit				Precipitation, in inches				Sky			Prevailing direction of the wind.
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest local amount	Number of rainy days	Clear	Pt. Cloudy	Cloudy	
January	31.7	−1.0	68	− 8	4.85	+1.01	2.20	13	8	6	17	W.
February	38.4	+6.9	72	2	3.07	−0.16	1.90	10	10	5	13	W.
March	34.4	−9.1	63	7	1.61	−2.43	1.42	8	12	7	12	W.
April	55.5	+3.7	101	10	1.93	−1.72	2.70	7	15	8	7	W.
May	61.1	−1.4	92	29	4.22	+0.38	1.86	13	10	9	12	W.
June	67.7	−1.8	95	33	3.63	−0.88	2.90	9	15	8	7	W.
July	71.9	−1.5	99	38	4.63	−0.03	2.91	13	12	11	8	W.
August	69.4	−2.6	99	36	4.84	+1.09	2.07	14	10	11	10	W.
September	67.6	+1.3	100	31	3.83	+1.18	2.49	9	16	8	6	W.
October	56.6	+1.9	89	20	4.11	+1.06	4.12	6	17	7	7	W.
November	45.2	+2.7	85	11	3.07	+0.51	2.15	9	13	8	9	W.
December	32.8	−0.8	68	0	4.35	−1.09	1.90	11	5	7	19	W.
Annual	52.7	−0.1	101	− 8	44.14	+1.10	4.12	122	143	95	127	W.

CLIMATOLOGICAL DATA FOR THE YEAR 1915

Stations.	Counties.	Elevation, feet.	Temperature (degrees Fahrenheit).						Precipitation (inches).							Number rainy days.	Sky.			Prevailing direction of wind.
			Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.	Total snowfall.		Number clear days.	Number partly cloudy days.	Number cloudy days.	
PANHANDLE DIVISION.																				
Bayard	Grant	2,500	14	47.5	90	July 31	− 2	Feb. 2	14	48.27	6.87	Aug.	1.91	Mar.	66.4	145				W.
Burlington	Mineral	875	22	51.2	98	July 31	8	Jan. 1	22	39.11	7.97	Aug.	1.10	Mar.	32.0					W.
Harpers Ferry	Jefferson						10		27	41.15	8.32	Aug.	0.76	Apr.	14.8	74				W.
Lost City	Hardy		10				10	Jan. 29	10											
Martinsburg	Berkeley	435	24	53.7	97	July 19	14	Jan. 30	25	43.53	8.36	Aug.	0.82	Mar.	52.5		190	104	71	nw.
Romney	Hampshire	824	19	54.2	101	Apr. 26	8	Jan. 1	19	39.59	5.58	Aug.	0.60	Mar.						
Upper Tract	Pendleton	1,230	18	51.8	96	Apr. 26	7	Jan. 3	19	27.36	6.22	Aug.	0.10	Apr.		66	200*	103*	62	W.
																				W.
Averages and extremes				51.7	101	Apr. 26	− 2	Feb. 2		39.67	8.36	Aug.	0.10	Apr.	31.4	95	195	103	67	W.
NORTHERN DIVISION.																				
Bens Run	Pleasants	622	15	53.8	96	Sept. 30	2	Jan. 29	16	42.89	5.81	Jan.	0.96	Apr.	41.0	113	208	79	78	
Brandonville	Preston								06	45.50	6.83	July	2.07	June	28.3	104				
Buckhannon	Upshur	1,411	20	51.6	90	July 31†	5	Jan. 22†	26	50.25	6.38	Jan.	1.68	Mar.	31.5	127	173	71	121	
Cairo	Ritchie	674	14	54.2	95	Apr. 26	− 1	Jan. 29	16	58.56	11.31	July	1.61	Apr.						
Central Station	Doddridge	950	19				0	Jan. 29	21											
Cortland	Tucker	3,300							4	45.71	6.75	Aug.	1.80	Mar.	41.0	106				
Creston	Wirt	701	15	55.3	98	Sept. 13	1	Jan. 29	16	46.42	5.84	Sept.	1.54	Mar.	11.6	141	111	66	188	SW.
Davis	Tucker	3,090							9	56.06	7.75	Aug.	2.26	Mar.	87.5					SW.
Elizabeth	Wirt	646							5	44.87	5.50	Aug.	1.32	Mar.		114				
Elkins	Randolph	1,940	16	50.4	91	July 31	2	Dec. 11	16	41.25	6.21	Aug.	1.69	Mar.	50.2	186	58	130	177	W.
Fairmont	Marion	884	11	52.8	97	July 31	8	Jan. 27	23	41.16	5.61	May	1.34	Mar.	13.5	150	213	29	123	W.
Glenville	Gilmer	738	23	54.3	96	Aug. 1	5	Jan. 29	29	41.43	5.06	Dec.	1.25	Mar.	16.5	104	152	46	167	S.
Grafton	Taylor	1,000	24	53.6	96	July 31	9	Jan. 29	25	47.34	6.11	Jan.	0.72	Mar	20.0	139	178	58	129	W.
Lost Creek	Harrison	1,026	19	52.7	93	July 31*	5	Jan. 29	20	39.22	6.48	Aug.	0.75	Mar.	14.5	118	171	66	128	W.
Mannington	Marion	974	14	51.8	92	July 31	3	Jan. 29	15	42.83	5.30	Jan.	1.43	Mar.	31.3	168	117	93	155	W.
Morgantown	Monongalia	1,250	24	52.6	94	July 14	6	Jan. 29	42	36.84	4.43	Dec.	0.59	Mar.	16.8					
Moundsville	Marshall	642	14		96	Sept. 14	− 2	Jan. 29	14	37.42	5.73	June	1.28	Mar.						
New Cumberland	Hancock	987	19		93	Sept. 17	− 8	Jan. 30	24											
New Martinsville	Wetzel	634	23	54.6	95	Apr. 26*	1	Jan. 29	24	46.07	6.51	Aug.	1.07	Apr.	6.7	124	155	77	133	S.
Parkersburg	Wood	638	28	54.0	94	July 31	2	Jan. 29	28	41.61	5.24	Dec.	1.42	Mar	19.5	148	116	103	146	SE.
Parsons	Tucker	1,656	17	49.9	89	Apr. 26*	1	Feb. 10*	17	45.35	5.54	Jan.	1.75	June	75.3		116	125	124	
Philippi	Barbour	1,149	20		94	Aug. 2	6	Jan. 29	24						44.1					W.
Pickens	Randolph	2,697	14	50.2	89	Apr. 25*	− 1	Feb. 10	26	67.82	11.38	Jan.	2.89	Apr.	134.0	153	158*	85	122*	W.
Rowlesburg	Preston	1,375							31	52.64	6.85	May	1.76	Mar.	39.6	173				W.
Saint Marys	Pleasants	577							9	41.46	6.18	Aug.	1.30	Apr.	4.0	105				
Smithfield	Wetzel	835	11	53.4	97	Apr. 26	1	Jan. 29	13	55.33	7.22	July	1.47	Mar.	33.5	149	142	112	111	W.
Terra Alta	Preston	2,612	15				− 2	Feb. 10	16											
Wellsburg	Brooke	1,225	16	50.3	87	Aug. 3	0	Jan. 29	23	40.42	6.05	July	1.48	Mar.	29.6	127	115*	120	130	W.
Weston	Lewis	1,026	21				8	Feb. 9	27											SW.
Wheeling	Ohio	645	30	53.2	99	Apr. 25	− 1	Jan. 29	32	40.80	5.10	May	1.18	Mar.	16.4	150	147*	68	150	SW.
Averages and extremes				52.7	99	Apr. 25	− 8	Jan. 30		45.97	11.38	Jan.	0.59	Mar.	35.1	135	146	83	136	W.
SOUTHERN DIVISION.																				
Bancroft	Putnam	574	12	53.8	96	July 16*	6	Jan. 29	14	44.12	5.33	Sept.	1.77	Apr.	10.4	124				NE.
Bluefield	Mercer	2,568	21	53.3	90	July 31	8	Jan. 22	23	28.15	4.18	July	0.90	Mar.	23.0	82				
Charleston	Kanawha	597	13	57.3	98	July 31	10	Jan. 29	31	43.32	5.28	Jan.	1.74	Apr.	5.7	136	139	41	185	W.
Cuba	Jackson	650	14	53.7	99	July 29	1	Jan. 29	18	37.06	4.87	Oct.	0.53	Mar.	9.2	113				W.
Elkhorn	McDowell	1,933	22	54.4	91	July 31	10	Jan. 22	24	40.86	7.54	July	1.26	June	28.7	116	126	157	82	W.
Evans	Jackson	606							1	46.86	5.44	June	1.29	Apr.		126	140	30	195	
Green Sulphur Springs	Summers	1,600	20	52.2	94	Aug. 2	− 3	Jan. 1	20	38.40	5.01	Aug.	1.40	Mar.	29.5	93	194	53	118	E.
Hinton	Summers	1,450	19	53.7	95	July 31*	12	Dec. 15	27	35.45	4.46	Jan.	1.99	Mar.	24.0	131	150	26	189	SW.
Holcomb	Nicholas	20.42	4	51.1	92	July 12	0	Jan. 22	4	49.71	6.47	July	1.93		82.7		163	36	166	
Huntington	Cabell	538	20	54.6	95	July 15	8	Jan. 29	21	46.69	6.22	Dec.	2.03	Apr.	7.0	130	160	38	167	W.
Lewisburg	Greenbrier	2,200	16	51.0	90	July 31*	4	Jan. 1	25	38.66	4.66	Oct.	0.84	Mar.	22.0	93	160	80	125	NW.
Marlinton	Pocahontas	2,151	17	46.6	88	July 30	0	Jan. 1	19	46.24	7.42	Jan.	1.33	Mar.	34.5	129	71	227	67	SW.
Nuttallburg	Fayette	2,252	23		93	June 13	10	Jan. 22*	24											
Point Pleasant	Mason	553	23	54.5	97	July 31	5	Jan. 29	26	43.74	5.87	Dec.	1.55	Apr.	5.0	144	137	60	168	SW.
Powellton	Fayette	933	20				10	Dec. 15	22											
Robertsburg	Putnam	574	16	53.0	96	July 18*	3	Jan. 29	16	45.78	4.89	Dec.	1.15	Apr.	4.5	123	152	44	169	
Ryan	Roane	700	13	53.3	98	July 31	− 1	Jan. 29	14	45.78	6.82	Sept.	0.93	Apr.	20.3	148	134	94	137	
Spencer	Roane	784	12	53.0	94	Apr. 26	− 1	Jan. 29	17	45.44	5.69	Dec.	0.86	Mar.	27.8	104	75	190	100	
Sutton	Braxton	839	10		96	Sept. 13			16											
Union	Monroe	2,250	12	51.9	90	Apr. 25*	6	Jan. 1	13	36.38	7.08	July	0.69	Apr.	18.5	76				
Williamson	Mingo	660	16	55.8	94	July 29	15	Jan. 22	16	44.20	5.53	Dec.	0.92	Apr.	8.7	135	165	82	118	W.
Averages and extremes				53.1	99	July 29	− 3	Jan. 1		42.05	7.54	July	0.53	Mar.	21.3	118	140	83	142	W.
State averages and extremes				52.8	101	Apr. 26	− 8	Jan. 30		43.76	11.38	Jan.	0.10	Apr.	29.4	125	146	84	135	W.

* 1 day interpolated from nearby stations.

† And other dates.

Monthly and Annual Mean Temperatures for the Year 1915, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September		October.		November		December.		Annual.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
PANHANDLE DIVISION																										
Bayard	28.4	−0.2	32.5	+5.6	28.8	−9.7	50.0	+3.2	55.4[b]	−1.8	61.6	−2.2	67.4	−0.4	65.4[b]	−0.4	61.8[b]	+1.4	50.8[c]	+1.7	40.2	+1.9	27.2	−2.2	47.5	−0.3
Burlington	29.6	−1.4	34.8	+5.1	34.8	−6.7	54.8	+4.2	57.9	−3.8	65.4	−3.3	71.7	−1.2	70.4[j]	−0.7	66.1	+1.3	54.6	+1.0	42.4	+0.1	32.0	−0.4	51.2	−0.5
Franklin	29.2	.....	35.6	.....	31.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lost City	31.4	.....	36.4	.....	32.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62.8	.....	53.2	.....	41.1	.....	31.1	.....	.....	.....
Martinsburg	31.9	+1.2	35.5	+6.0	37.6	−3.5	58.0	+6.8	60.9	−2.4	70.2	−0.7	76.0	+0.6	72.3	−0.8	69.2	+2.7	56.6	+2.1	43.4	+0.5	32.6	−0.4	53.7	+1.0
Moorefield	30.2	−2.2	33.9	+2.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Piedmont	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74.0	.....	70.4[k]	.....	68.7	.....	56.1	.....	43.4	.....	31.4	.....	.....	.....
Romney	32.2	+0.8	37.8[b]	+6.8	37.7	−5.1	57.6	+6.7	61.7	−0.8	69.4	−0.6	75.4	+0.3	73.0	+0.3	69.4	+3.0	57.7[f]	+3.1	45.6	+3.2	33.0	+1.1	54.2	+1.6
Upper Tract	31.0[a]	−1.4	37.8[a]	+6.1	33.7	−10.1	54.6[a]	+3.4	59.6[a]	−2.3	65.6	−2.6	71.2	−1.2	68.4[b]	−2.7	66.0	−0.2	57.0	+1.9	44.7	+1.1	31.5	−2.5	51.8	−0.9
NORTHERN DIVISION																										
Bens Run	31.4	−1.0	39.2	+8.5	36.0	−8.0	56.8	−4.8	61.2	−2.4	68.7	−1.8	73.4	−1.8	69.7	−4.2	70.0	+1.8	58.1	+1.8	46.2	+3.2	34.6	+1.5	53.8	−06
Buckhannon	32.2	+0.1	37.6	+6.8	32.9	−9.0	53.8	+2.9	60.0	−2.2	66.2	−2.8	69.7	−2.7	67.8	−2.4	65.4	+0.8	55.2[j]	+2.2	45.2	+3.9	32.8	−0.2	51.6	−0.2
Cairo	32.7	−1.9	40.2[g]	+8.2	37.3[d]	−8.7	58.7	+4.1	62.0	−1.9	69.4	−1.2	72.3	−2.1	69.8	−3.3	68.6	+0.7	57.4	−0.1	48.0	+4.3	34.5	+0.5	54.2	−0.1
Central Station	31.2	−0.8	39.0	+9.0	33.8[j]	−9.1	57.8[d]	.....	59.0[m]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.6[e]	+1.1	32.6[e]	−0.4	.....	.....
Creston	34.8	+0.9	40.2	+8.6	37.3	−6.9	58.0	+5.8	64.5	+1.0	70.0	−0.8	74.6	−0.1	71.5	−1.7	70.6	+3.1	59.6	+4.6	47.5	+4.1	34.6	+0.6	55.3	+1.6
Elkins	31.8	+2.8	36.8	+5.3	31.2	−7.9	51.8	+3.1	58.8	−0.3	65.6	−1.0	69.0	−1.5	66.8	−1.6	65.8	+3.9	54.2	+2.8	42.8	+3.2	30.1	−2.4	50.4	+0.5
Fairmont	31.0	−3.6	38.0	+4.4	34.1	−8.6	55.8	+3.7	61.0	−1.6	68.6	−1.9	73.3	−1.0	70.3	−2.6	68.7	+1.4	56.2	+1.2	44.1	+1.4	32.0[a]	−1.8	52.8	−0.8
Glenville	33.6	+0.5	40.8	+9.1	36.0	−8.2	56.9	+3.8	62.0	−1.5	68.3	−2.4	73.4	−1.3	72.1	−1.3	70.6	−3.0	57.0	+1.8	45.8[a]	+2.4	35.6	+0.7	54.3	0
Grafton	33.6	+1.2	38.1	+7.1	33.7	−9.4	54.9	+3.4	61.6	−0.7	68.6	−0.7	72.4	−0.6	70.8	−0.8	68.0[a]	−1.4	58.7	+3.0	48.4	+5.5	35.0	−0.9	53.6	+0.5
Lost Creek	33.0	0	38.8	+8.8	33.8	−9.7	54.8	−5.1	60.8	−0.2	67.3	−0.6	71.2	−1.2	69.4	−1.3	67.6	+2.4	56.1	+1.5	46.2	+3.9	33.5	+0.4	52.7	−0.1
Mannington	32.1	+0.6	37.8	+7.9	33.4	−10.6	53.7	+2.4	59.3	−2.1	66.2	−2.3	70.5	−2.1	68.2	−3.0	66.9	+1.3	55.4	+1.6	45.2	+4.4	32.8	+0.1	51.8	−0.2
Morgantown	32.1[a]	−0.2	39.8	+8.9	33.6[a]	−9.0	56.1[e]	+4.9	61.1[a]	−2.6	67.6[a]	−1.5	71.8	−1.8	69.2	−3.1	68.4[b]	+0.8	55.6[e]	+0.5	44.4[b]	+1.1	32.8	−1.3	52.6	−0.3
Moundsville	29.3[a]	.....	37.3[c]	+5.8	31.4[a]	−13.1	.....	.....	59.2[c]	−4.1	69.0[b]	−0.9	73.4[b]	.....	71.2[e]	.....	69.6[f]	.....	58.4	+2.8	47.8	+5.0	33.8	+0.1	.....	.....
New Cumberland	27.8	−0.9	35.4	+8.2	32.7	−7.9	.....	.....	65.6	−2.7	70.9	−2.2	67.9	−1.1	66.6	+1.0	54.4	+0.1	42.7	+1.5	29.8[b]	−1.3	.....	.....	.....	.....
New Martinsville	32.8	−0.2	39.6	+7.9	36.0	−7.9	57.0	+3.9	62.1	−1.7	70.2	−1.4	73.8	−1.8	70.2	−3.9	70.0	+1.2	58.4	+1.7	49.5	+5.2	35.8	+1.0	54.6	+0.3
Parkersburg	31.9	+0.6	39.7	+5.9	35.4	−7.0	57.3	+4.3	61.6	−1.6	69.6	−1.9	73.7	−1.8	69.8	−3.5	69.4	+3.3	57.8	+3.2	47.0	+3.8	34.2	−1.1	54.0	+0.3
Parsons	31.8	+0.1	36.1	+7.2	31.1	−9.3	51.2	+2.4	57.4	−1.9	63.8	−2.7	68.8	−2.2	67.0	−2.2	65.1	+1.6	55.0	+2.3	41.3	+0.1	29.7	−1.7	49.9	−0.5
Philippi	32.6	+1.8	39.3	+8.3	33.6	−9.6	54.4	+3.4	.....	.....	68.6	0	72.0	−0.9	70.0	−1.7	67.5	+1.9	58.0	+3.9	47.0	+4.1	33.3	+0.1	.....	.....
Pickens	31.5	0	38.2	+6.7	30.6	−9.4	53.4[a]	+5.1	58.9	0	63.9	−1.6	65.8	−3.2	64.2	−2.8	64.0	+2.2	56.5	+4.7	45.4[a]	+4.7	30.1[a]	−2.3	50.2	+0.3
Smithfield	34.7	.....	40.6	.....	39.8	.....	57.4	.....	59.1	.....	65.6	.....	72.6	.....	69.8	.....	68.0	.....	56.1	.....	44.2	.....	32.6	.....	53.4	.....
Terra Alta	27.4	−0.9	37.5	+10.2	28.9	−11.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65.2	+2.2	51.9	+0.2	46.7[f]	+4.6	27.0[b]	−3.8	.....	.....
Wellsburg	28.2	−1.3	35.8	+9.2	31.9	−7.8	54.2	+5.6	57.1	−3.8	65.3	−2.4	70.1	−1.8	66.6[a]	−3.5	65.9	+1.1	54.8	+1.3	43.3	+2.3	30.0	−0.7	50.3	−0.2
Weston	33.4[d]	−0.6	38.4	+7.1	34.1	−10.3	55.6	+3.2	61.2[a]	−2.3	68.4[c]	−2.7	70.8[a]	−4.1	68.4	−4.9	.....	.....	54.4[a]	−0.5	.....	.....	33.2[a]	−1.9	.....	.....
Wheeling	29.7	.....	38.4	.....	35.7	.....	57.4	.....	60.0	.....	68.8	.....	73.0	.....	71.0	.....	70.9	.....	55.9[b]	.....	44.2	.....	33.3	.....	53.2	.....
SOUTHERN DIVISION																										
Bancroft	31.5	−4.1	39.4	+8.3	35.6	−9.8	56.0	+2.4	62.6	−1.8	69.4	−2.3	73.8	−1.8	70.6	−3.6	69.0	−0.9	57.3	−0.4	46.2	+1.3	34.6	−1.0	53.8	−1.1
Beckley	33.7	+0.5	39.8	+7.8	36.9[j]	−6.1	52.2	+3.1	61.2	+1.6	66.0	−1.4	69.7	−1.8	.....	.....	67.5	+4.1	57.4	+3.2	48.5	+6.2	.....	.....	.....	.....
Bluefield	33.2[g]	−1.2	41.1[d]	+6.9	34.8	−9.3	55.8	+2.3	63.2	+0.8	67.0	−1.8	70.3	−1.6	69.2[a]	−2.2	66.5	+0.3	57.3[b]	+1.9	46.7	+2.3	35.3[b]	+0.3	53.3	−0.1
Charleston	36.0	−3.3	43.2	+5.3	39.2	−10.6	59.2	+2.6	66.5	+0.5	74.2	+1.7	76.6	+0.2	73.8	−1.7	71.2	+0.7	59.6	+1.2	49.8	+1.9	37.8	−2.1	57.3	−0.3
Clay	32.8[a]	.....	39.4[a]	.....	35.1[a]	.....	56.4[a]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuba	32.3	−1.5	41.0	+9.4	35.4	−9.4	56.2	+3.9	62.2	−0.7	68.6	−0.5	72.5	−0.8	69.2	−2.8	67.3	+0.2	57.0	+2.0	48.2[e]	+4.9	34.1	+0.2	53.7	+0.4
Dunlow	30.5	.....	40.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61.0	.....	.....	.....	.....	.....	.....	.....
Elkhorn	37.2	+0.3	43.4	+8.1	36.2	−10.2	55.4	+2.3	63.0	+0.3	67.0	−1.7	71.4	−0.8	67.8	−3.3	68.0	+1.6	58.4	+2.7	48.4	+2.7	36.8	−0.5	54.4	+0.1
Green Sulphur Springs	31.8	−1.3	38.0	+6.1	33.9	−9.8	53.6	+2.5	62.1	+0.4	67.0	−1.7	70.8	−1.7	69.1	−2.5	67.6	+1.4	56.7	+2.2	44.0	+1.5	32.3	−1.6	52.2	−0.4
Hinton	31.6[a]	−3.4	39.0	+4.9	34.8	−10.2	55.2	+1.9	63.2	−1.1	68.6	−2.4	73.4	−1.1	72.4	−1.7	69.6	+1.4	58.8	+2.3	44.6	+0.2	33.2	−2.6	53.7	−1.0
Holcomb	30.6	.....	35.4	.....	31.4	.....	53.2	.....	60.6	.....	67.2	.....	69.4	.....	67.8	.....	66.2	.....	56.0	.....	43.4	.....	31.8	.....	51.1	.....
Huntington	32.6	−4.0	39.9	+8.1	37.0	−8.1	58.0	+4.7	63.8	−1.1	71.6	−1.1	75.2	−1.5	71.2	−3.6	68.5	−0.2	56.8	+0.7	46.2	+2.6	35.0	+0.7	54.6	−0.2
Lewisburg	30.2	−2.2	37.7	+6.5	33.4	−9.8	52.8	+2.7	60.6	−0.2	65.3	−2.4	69.5	−1.9	68.0	−2.0	65.2	+0.5	55.4	+2.1	43.6	+2.3	30.8	−1.8	51.0	−0.5
Madison	32.0[b]	.....	41.4[k]	.....	37.2[g]	.....	56.2[e]	.....	65.6[d]	.....	72.2[i]	.....	75.2[b]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marlinton	26.3	−2.9	32.6	+3.5	29.0	−10.7	48.4	+0.8	55.4	−4.2	61.0	−4.9	65.0	−4.2	64.0	−4.0	61.5	−1.1	51.3	+0.7	37.5	−0.7	26.6	−3.3	46.6	−3.0
Nuttallburg	28.8[c]	−3.2	36.4[d]	+4.7	30.1[d]	−12.0	51.4[i]	.....	57.4[k]	−3.9	63.5[i]	−4.2	67.5[e]	−3.9	65.7[i]	−4.0	63.0[f]	−2.4	52.8[g]	.....	44.0[i]	.....	.....	.....	.....	.....
Point Pleasant	32.4	−1.7	39.6	+6.7	36.8	−8.9	57.2	+2.3	62.9	−2.7	70.4	−2.6	74.2	−2.5	70.4	−4.5	69.7	0	58.4	+1.0	47.4	+2.4	35.0	−0.2	54.5	−1.0
Powellton	36.0[g]	−0.7	42.9[c]	+8.1	38.6	−7.5	60.2[f]	+6.0	67.6[j]	.....	70.9[j]	.....	74.6[e]	+0.4	.....	.....	69.8[b]	+2.7	60.8[b]	+4.7	49.8	+5.4	36.6[e]	+0.6	.....	.....
Robertsburg	31.2	−3.4	38.3	−5.8	34.6	−11.3	55.1	+2.0	61.8	−2.5	69.4[a]	−2.1	73.2	−2.7	69.6	−5.0	69.4	+0.8	56.8	−0.4	44.4	+1.0	32.8	−1.8	53.0	−1.6
Ryan	32.8	−2.2	39.2	+6.5	34.0	−11.2	55.3	+2.8	61.7	−0.8	67.9	−1.3	73.2	−0.1	69.2	−2.8	67.9	+1.4	57.4	+3.2	46.7	+3.6	34.2	+0.1	53.3	−0.1
Spencer	32.6	.....	38.4	.....	35.6	.....	56.3	.....	61.6	.....	67.9	.....	71.1	.....	69.2	.....	67.2	.....	56.8	.....	46.4	.....	32.6	.....	53.0	.....
Sutton	.....	.....	.....	.....	36.2[b]	.....	56.8[f]	.....	63.4[b]	.....	69.6[c]	.....	73.8[a]	.....	71.8[d]	.....	71.6[e]	.....	60.2	.....	.....	.....	.....	.....	.....	.....
Union	31.0	−2.2	38.5	+5.7	34.2[a]	−9.9	54.0[a]	+3.2	61.0[a]	+0.3	65.8[a]	−1.1	69.0[d]	−1.9	67.5[e]	−3.2	67.5[e]	+2.4	59.2[a]	+6.5	44.5[a]	+4.8	31.1[a]	−0.8	51.9	+0.3
White Sulphur Springs	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64.4	.....	68.4	.....	67.6	.....	65.0	.....	55.4	.....	44.2	.....	31.0	.....	.....	.....
Williamson	32.0	−4.5	39.2	+3.3	35.5	−12.5	58.2	+3.0	65.6	−0.4	72.0	−0.3	75.4	−0.4	73.0	−2.1	71.7	+1.8	61.4	+3.2	48.6	+3.5	37.4	+0.2	55.8	−0.4

Monthly Maximum Temperatures for the Year 1915, with Dates.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
PANHANDLE DIVISION.																								
Bayard	52	7	61	23	48	25	88	26*	80[b]	22	86	13	90	31	88[b]	1*	87[b]	14*	77[d]	17	69	11	56	18*
Burlington	49	7	66	23	59	25	93	25	78	4*	86	11*	98	31	89[i]	1*	90	14	79	15	75	1	61	25
Franklin	46	4	53	23	42	10*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lost City	52	18	58	23	50	25*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84	7	74	15	72	2	54	24
Martinsburg	51	7*	62	23	59	25	94	25*	82	8	94	13	97	19	93	1*	95	15	83	15	79	1	58	21
Moorefield	56	17	58	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84	4	.....	.....	.....	.....
Piedmont	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95	31	90	2	96	15	78	15	74	1	57	25
Romney	58	23	68[b]	23*	61	25	101	26	85	22	95	13*	99	19	99	1	100	13	84[f]	21	80	2	58	26
Upper Tract	51[a]	17	64[a]	23*	57	25	96[a]	26	85[a]	21	90	13	95	16	93[b]	1	90	11*	85	3	76	12	56	25
NORTHERN DIVISION.																								
Bens Run	60	17	65	23	55	14	92	25*	80	11*	90	28	94	31	90	1*	96	13	80	4*	78	11	58	17*
Buckhannon	61	17	67	23	53	15	88	26	82	21	89	13*	90	31	90	2*	89	13	78[j]	4*	78	26	61	17
Cairo	60	17	68[g]	14*	58[d]	14*	95	26*	86	22	90	14	90	21	92	1	92	14*	82	19	79	12	60	25
Central Station	60	16*	69	23	54	14*	90	25*	84	21	88	.....	.....	.....	.....	.....	.....	.....	.....	.....	77[g]	8	64[e]	23
Creston	68	16	68	13*	61	14	95	26	88	16	93	28	97	19*	94	1*	98	13	89	14	79	11	61	17
Elkins	59	18	65	21	51	4	88	26	82	21	89	13	91	31	89	2	89	14	81	4	76	11	57	25
Fairmont	60	17	71	23	59	14	95	26	85	11	93	18	97	31	95	1*	96	14*	85	4*	79	11	61[a]	25
Glenville	64	17	68	22*	57	14	94	26*	86	21*	90	13*	95	31	96	1	95	14	85	4*	81[a]	11	64	17*
Grafton	61	17*	66	23	62	14	94	26	86	21	93	28	96	31	94	1	94[a]	13*	83	4*	81	11	65	18*
Lost Creek	62	17	71	23	56	14	92	26	84	21	90	18	93	31	91	1*	93	14*	84	15	78	11	62	17*
Mannington	62	17	69	23	53	14*	90	26*	82	21	87	18*	92	31	91	3	90	14	81	18	77	11	61	18*
Morgantown	60	17	69	23	52	14	88[b]	26	83	21	89[a]	18	94	14	92	3	92[b]	13*	80[b]	4	74[h]	11	61	17*
Moundsville	60[a]	16*	67[a]	14	45[a]	13*	.....	.....	86[e]	21	91[b]	13*	93[b]	16*	95[e]	1	96[f]	14	84	5	77	11	61	17
New Cumberland	52	17	64	23	55	14	.....	.....	.....	.....	86	7*	92	18	90	1*	93	17	81	4	75	11	58[b]	17
New Martinsville	62	16	66	14	58	14	95	26	87	25	91	28	95	31	93	3	94	14	83	18	85	11	65	17
Parkersburg	60	17	66	23	53	14	91	25	86	21	89	13	94	31	91	1	92	13	80	4	77	11	58	17
Parsons	60	19	68	23	52	26	89	26*	82	20	88	14*	89	31	89	1	88	14	79	16[k]	75	11	62	25
Phillippi	59	17	70	23	52	14*	92	26	.....	.....	92	21	93	31	94	2	93	13	86	5	76	11	67	18
Pickens	60	5	71	21	54	14	89[a]	25	89	14	85	13	82	16*	80	1*	89	15	85	16	77[a]	6*	53[a]	18*
Smithfield	60	16	68	23	62	23	97	26	85	16	90	14*	96	31	95	15	92	15	87	4	77	11	66	17
Tera Alta	54	16	67	24	48	5*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84	14*	70	4*	67[f]	11	48[b]	2
Wellsburg	53	17	64	23	51	14	86	26	79	21	84	18	86	31	87[a]	3	85	13*	76	4	71	11	56	17*
Weston	64	15	70	23	52	15*	90	26	81[a]	21	86[e]	12*	90[a]	15*	90	1	.....	.....	80	14	.....	.....	62[a]	25*
Wheeling	59	17	69	23	62	14	99	25	84	21	89	28	93	18	95	16	97	13*	85	4	79	11	58	17*
SOUTHERN DIVISION.																								
Bancroft	62	16*	70	22	60	25	94	26	87	21	89	13	96	16*	96	1	92	13*	82	18	80	8*	65	17
Beckley	68	16	68	2	61[i]	1*	85	22*	84	30	85	14*	89	13*	.....	.....	88	17	81	6*	79	7	.....	.....
Bluefield	59[g]	19	66[d]	21	55	25	87	26*	83	22*	85	14	90	31	88[a]	1	87	13	80[b]	16	73	11	59[b]	18*
Charleston	64	17	71	14*	62	25	95	26	91	21	95	13*	98	31	95	2	96	14	87	4	85	1	68	17
Clay	63[a]	17	70[a]	23	59[a]	25	94[a]	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84[a]	12	.....	.....	56[a]	30
Cuba	63	16	70	14	58	14	94	25*	86	21	89	13	99	29	93	1	88	12*	81	13*	79[e]	8	57	18
Dunlow	65	17	65	10*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86	18	.....	.....	.....	.....
Elkhorn	63	31	68	13	55	25	88	26	84	21	86	17*	91	31	89	1*	88	14	81	16	74	11	63	17*
Green Sulphur Springs	59	19	65	13*	59	25	92	26	84	21	92	21	93	30*	94	2	91	11	82	15	75	1*	59	25
Hinton	55[a]	16	68	22*	63	25	93	26*	88	21	92	13	95	31	95	1*	93	12*	85	16*	77	1*	57	25
Holcomb	58	18	65	20	53	15	91	26	86	21	89	13	92	12	90	1*	92	12	85	16	76	11	58	17*
Huntington	60	17	67	23	60	25	92	26	88	21	91	7*	95	15	92	1	90	11*	77	14*	75	1*	65	17
Lewisburg	58	18	64	22	57	25	88	28	82	21	86	13	90	31	90	2	85	10*	79	16	72	1	54	25
Logan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Madison	64[b]	17	72[b]	23	62[g]	17*	90[b]	25*	91[d]	21	92[i]	13	95[b]	15*	93[b]	2	.....	.....	.....	.....	.....	.....	.....	.....
Marlinton	46	19	56	22	50	25	83	27	76	21	80	13	88	30	81	2	81	18	74	15	64	1*	50	25
Nuttallburg	55[e]	17	60[d]	22	50[d]	25	84[i]	25	80[k]	21	89[d]	13	85[e]	19*	86[i]	1	82[f]	8	70[e]	15*	70[i]	1*	.....	.....
Point Pleasant	61	16	68	14*	58	14	94	26	88	21	90	7*	97	31	94	1	95	13	83	4	79	1*	64	17
Powellton	64[g]	17	71[e]	13*	61	25	95[e]	26	92[j]	12	92[g]	13	96[e]	19	.....	.....	92[h]	12*	85[b]	4	79	11	68[e]	18
Robertsburg	61	5	68	14*	57	25	92	25*	87	21*	91[a]	7	96	18*	94	1	96	13	84	4*	77	7	68	17
Ryan	61	16	70	23	58	25	90	26	85	21*	90	28	98	31	93	1	93	12	84	18	80	26	62	29
Spencer	64	16	72	23	59	18	94	26	87	21	89	5*	93	30	91	3	90	12*	84	14	77	7*	61	24
Sutton	.....	.....	.....	.....	59[g]	14	95[f]	27	89[h]	21	92[g]	13*	95[m]	.....	91[d]	3*	96[e]	13*	88	4	.....	.....	.....	.....
Union	60	18	65	14*	60[a]	25	90[a]	25*	84[a]	20	87	13	88[d]	18	87[e]	16	90[a]	11*	85[a]	16	75[a]	2*	58[a]	17
White Sulphur Springs	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90	13	88	31	89	1	84	11	78	15	73	1	54	29
Williamson	61	16	69	22	57	15*	93	26	89	21	91	11	94	29	92	2	93	13*	89	14	81	11	68	17

* Also other dates.

Monthly Minimum Temperatures for the Year 1915, with Dates.

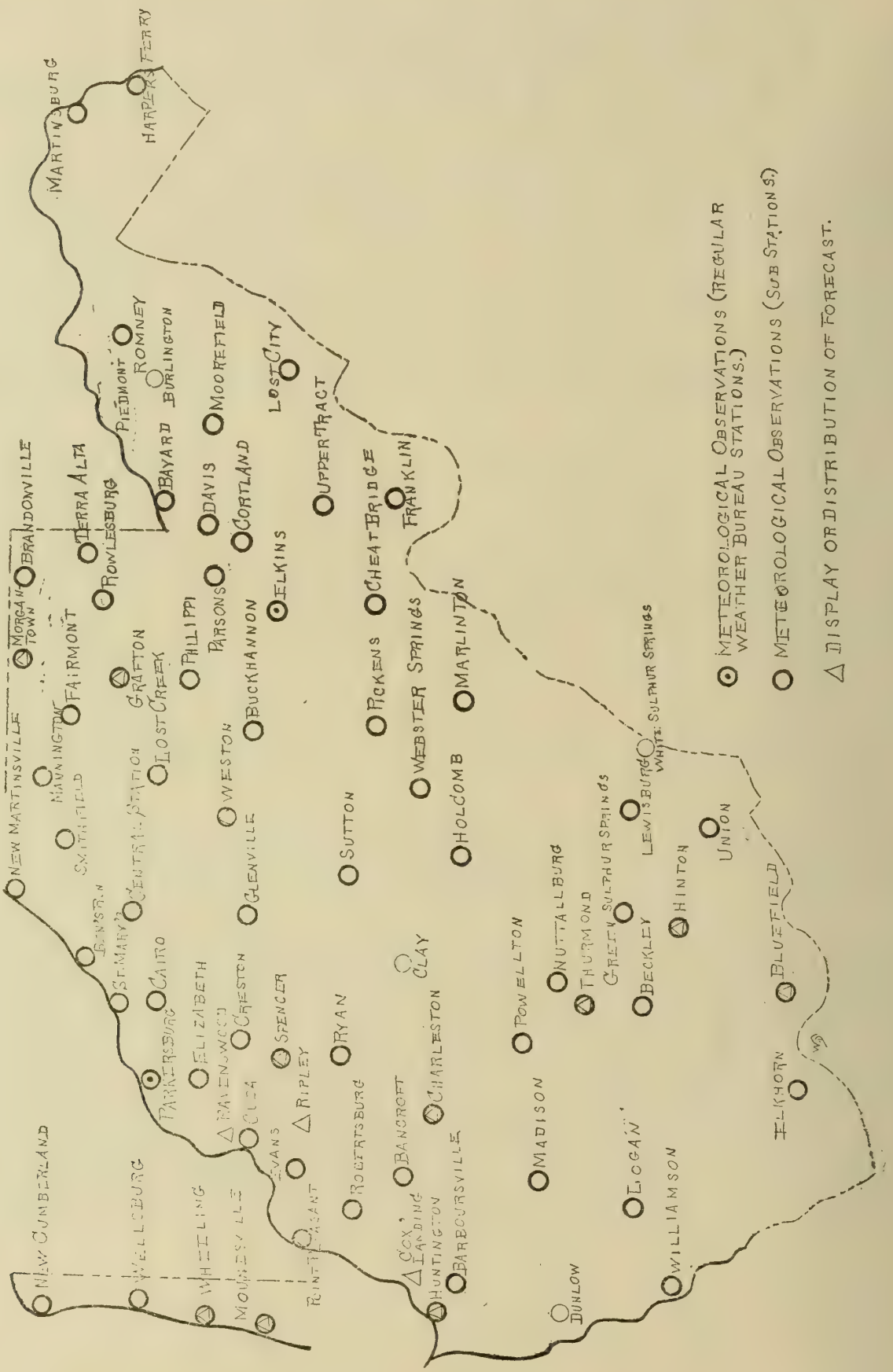
Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
PANHANDLE DIVISION																								
Bayard	3	14	− 2	10	7	4*	13	2	29[b]	2*	33	24	39	9	37[b]	18	31[b]	23	20[c]	24*	11	23	0	11
Burlington	8	1	10	10	13	4	17	2	35	2*	40	24	47	9	44[l]	19	36	23	25	25	18	23	11	11
Franklin	12	1	13	10	15	4																		
Lost City	10	29	12	10	16	1*											38	23*	28	25	20	23*	12	11
Martinsburg	14	30	15	10	21	1*	23	1	39	27	49	3*	54	11	50	18	39	30	31	25	23	23	19	16*
Moorefield	14	29	12	20																				
Piedmont													53	9	49		41	23	28	11*	21	23	12	11*
Romney	8	1	13[b]	10	16	4*	20	2	35	11*	42	24	48	9	44	19	36	23*	25[a]	25	20	17*	11	22
Upper Tract	7	3	9[a]	10	12	4	16[a]	2	35[a]	5*	38	24	44	10	43[b]	19	35	23	23	11	19	23	8	11
NORTHERN DIVISION																								
Bens Run	2	29	15	10	17	30	23	2	41	2*	44	24	56	6*	46	31	42	30	30	10	23	30	17	15
Buckhannon	5	22*	12	10	15	4*	18	2	36	6	38	24	45	22	43	19	35	23	23[j]	10	21	23	11	1*
Cairo	− 1	29	6[g]	9	15[h]	6*	21	4	35	11	40	24	51	6*	48	19*	40	29	27	10	22	17	16	11*
Central Station	0	29	7	9	12[i]				34	2*	36										19[c]	16*	13[c]	1
Creston	1	29	9	9	16	1*	18	2	38	11	43	24	51	9	47	19	41	23	27	10	21	25*	15	1*
Elkins	9	22	5	10	13	4	18	2	35	11	37	24	46	9	45	19	37	23	24	10	19	30	2	11
Fairmont	8	29	13	10	14	30	20	2	37	2*	42	24	49	6	47	31	40	23*	28	10*	21	23	13	16
Glenville	5	29	8	9	16	13	20	2	40	1*	41	24	51	9	49	19	41	1*	22	31	15[a]	16*	14	6
Grafton	9	29	15	10	15	27	19	2	32	2	42	5*	49	9	46	19	39	23*	28	10*	21	23	14	11
Lost Creek	5	29	10	9*	12	27*	15	2	34	2*	34	24	46	10	44	19	36	23	21	10	18	23	9	21*
Mannington	3	29	9	10	13	30	18	2	35	2*	38	24	47	6	43	19*	37	29	25	10	20	23	8	15
Morgantown	6[a]	29	9	10	16[a]	27[c]	21[c]	2	36[a]	27	41[a]	24	50	9	46	19*	38[b]	29	28[c]	24	21[a]	30	12	16
Moundsville	− 2[a]	29	10[c]	10	16	13*	21	2*	37	2*	40[a]	24	51[a]	6	43[d]	31	36[f]	29	27	26	24	16	9	16
New Cumberland	− 8	30	6	10	12	1*					39	24	48	6*	36	31	31	29	21	24*	19	23	8	16
New Martinsville	1	29	14	9	17	30	22	1*	38	2*	42	24	52	6	46	31	42	23*	28	10	24	16*	17	15
Parkersburg	2	29	15	10	18	30	22	2	40	10	47	24	55	6	48	31	43	23	28	10	24	30	18	15
Parsons	2	29	1	10	8	30	10	1*	32	2	38	24	40	10	45	19	37	24	26	12*	17	23	1	11
Philippi	6	29	10	10	14	4	14	2			38	24	38	9	49	19	39	29	25	10	21	30	12	11
Pickens	0	22	− 1	10	10	1*	17[a]	2	33	18	37	24	46	6*	44	19	36	22*	23	10	13	30	6	11
Smithfield	1	29	11	10	12	4*	27	18	32	10	40	11*	42	5	45	31	38	28	27	10	20	23	11	1*
Terra Alta	0	3	− 2	10	8	31											38	26*	20	24	18[f]	29*	0[b]	11
Wellsburg	0	29	9	10	13	30	25	4	35	27	41	24	52	6*	41[a]	31	38	29	28	9	21	30	13	15
Weston	10[d]	22	8	9	16	27*	18	2	38[a]	6*	40[c]	24	50[a]	8	48	19			28[j]	10			12[a]	14*
Wheeling	− 1	29	12	9*	17	1*	22	1*	39	2*	42	24	52	6	44	31	40	29	29[b]	10*	23	20	12	11*
SOUTHERN DIVISION																								
Bancroft	6	29	15	10*	18	1*	18	1	40	10*	45	24	52	23*	51	19	41	23	30	10*	20	30	12	15
Beckley	8	22	10	10	15	13[k]	19	2*	37	10*	39	23	47	6*			38	24	26	10	12	30	9	16
Bluefield	8[g]	22	15[d]	10	18	18	23	1*	39	19	41	24	48	6	50[a]	23*	40	22	25[b]	10	16	30	15[b]	15
Charleston	10	29	18	10	19	13	21	1	41	10	46	24	52	23	52	19	43	23	34	10*	24	30	14	15*
Clay	8	29	5	10	14	18	21	3																
Cuba	1	29	4	8	14	30	16	2	34	10	41	24	48	9	47	19	39	22*	25	10	20[c]	16*	13	1*
Dunlow	16	22	17	8															29	10				
Elkhorn	10	22	17	10	19	18	22	1	41	18	41	24	53	7	49	26	42	22*	27	10	21	30	16	20
Green Sulphur Springs	− 3	1	10	10	13	13	16	1	36	10	36	24	46	6	45	31	34	22*	25	10	17	16*	3	15
Hinton	14	1*	16	10	17	13[c]	21	1*	40	10	43	24	52	6	53	26	40	22	31	10*	20	17	12	15
Holcomb	0	22	4	10	12	1*	17	2	32	10	37	25	46	6	47	20	35	23	27	10*	15	16	8	1
Huntington	8	29	20	10*	21	30	23	1	42	10*	47	24*	55	6*	52	19	43	24	31	10	25	30	18	16
Lewisburg	4	1	11	10	17	4*	17	1*	35	10	38	24	46	6	46	26	34	24	24	10	19	17*	10	15*
Logan																								
Madison	9[c]	29	18[i]		20[f]	2*	20[a]	1*	41[d]	10*			55[b]	6	54[c]	19								
Marlinton	0	1	4	10	9	13	14	2	31	6	36	24	42	6	44	26	34	23	20	10	16	17	2	15
Nuttallburg	10[c]	22*	10[d]		11[d]	4	19[i]	1	36[k]	18	40[d]	24*	49[c]	6	49[i]	19*	38[f]	23	26[c]	10	12[j]	30		
Point Pleasant	5	29	14	10	14	30	16	1	37	10*	42	24	50	9*	46	19*	39	22	27	10	18	30	13	15
Powellton	12[c]	29	15[c]	10	20	13	22[f]	1	40	18	42[a]	24	49[c]	6			41[b]	24	28[b]	10	23	30	10[c]	15
Robertsburg	3	29	14	10	15	31	16	1	36	9	42[a]	24	51	6	50	19	38	23	26	10	19	30	12	15*
Ryan	− 1	29	10	10	13	13	14	1*	33	10	39	24	47	7*	46	26	37	23	25	10	19	16*	10	15
Spencer	− 1	29	9	10	13	13	16	2	35	6*	40	24	49	6*	45	19	36	23	24	9	19	16*	7	15
Sutton					17[h]	13*	19[f]	2	38[h]	11	42[c]	24	50[m]	6	51[d]	19	41[c]	23	31	10*				
Union	6	1	11	10	14	13	17	1	36	9	38[a]	24	50[c]	5*	46[c]	26	36	23	24	10	19	17*	10	27
White Sulphur Springs											37	24	41	6	47	7*	36	24	24	10	18	17	9	7
Williamson	15	22*	19	8*	19	2*	25	1*	42	2	50	24	55	6	56	31	46	23	31	9	25	30	18	15

* Also other dates.

Monthly and Annual Precipitation for the Year 1915, with Departures from Normal

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
PANHANDLE DIVISION.																										
Bayard	5.20	−0.06	3.14	−0.33	1.91	−2.66	2.25	−1.16	6.22	+2.03	50.4	−0.05	3.55	−1.58	6.87	+2.41	3.79	+0.64	3.69	+0.30	2.85	+0.21	3.75	−0.45	48.27	−1.49
Burlington	2.00	−0.63	1.62	−0.88	1.10	−2.00	1.75	−0.85	4.33	+0.48	4.35	+0.22	3.84	+0.21	7.97	+4.40	2.95	+0.09	4.20	+2.01	1.55	−0.28	3.45	+0.79	39.11	+3.56
Franklin																										
Harpers Ferry	5.26	+2.49	4.00	+1.39	1.01	−2.30	0.76	−2.21	4.35	+0.66	5.21	+1.64	1.87	−1.44	8.32	+4.76	2.12	−0.73	3.74	+0.90	1.45	−0.86	3.06	+0.36	41.15	+4.66
Lost City	4.14		3.37		0.70												2.33		3.08		2.61		3.21			
Martinsburg	4.96	+2.53	4.32	+1.93	0.82	−2.42	0.93	−2.06	4.95	+1.23	5.84	+1.70	3.20	−0.77	8.36	+4.67	2.49	−0.30	3.16	+0.58	1.29	−0.91	3.21	+0.52	43.53	+6.70
Moorefield	2.52	−0.02	3.04	+0.59															3.17	+0.95	1.67	0	2.45	+0.17		
Piedmont													2.98		4.85		2.00		3.90		1.92		2.83			
Romney	4.04	+1.35	2.29	+0.05	0.60	−2.46	2.15	−0.50	4.31	+0.62	2.96	−1.23	3.32	−0.26	5.58	+1.74	4.29	+2.01	3.94	+1.63	1.67	−0.31	3.44	+1.00	38.59	+3.64
Upper Tract	3.61	+1.04	0.90	−0.84	0.55	−1.94	0.10	−2.36	3.12	−0.33	2.95	−1.51	1.82	−2.05	6.22	+2.36	2.17	−0.13	3.05	+0.77	1.52	−0.19	1.35	−1.11	27.36	−6.29
NORTHERN DIVISION.																										
Bens Run	5.81	+1.52	2.29	−1.00	1.82	−2.52	0.96	−3.38	3.57	−0.47	5.07	−0.66	4.90	+0.13	4.67	+0.67	3.99	+1.77	1.39	−1.59	3.13	+0.64	5.29	+1.38	42.89	−3.51
Brandonville	4.58		4.46		2.08		2.62		5.63		2.07		6.83		3.94		2.70		3.71		2.73		4.15		45.50	
Buckhannon	6.38	+2.26	3.96	+0.19	1.68	−2.75	4.06	−0.23	4.39	+0.01	2.53	−2.37	4.78	−0.63	5.97	+2.08	4.74	+1.73	3.75	+0.37	3.60	+0.13	4.41	+0.25	50.25	+1.04
Cairo	4.20	−0.08	3.92	+0.35	1.80	−2.27	1.61	−2.24	4.78	+1.35	6.15	+1.42	11.31	+7.21	5.81	+2.29	4.91	+2.46	4.52	+1.47	3.74	+1.17	5.81	+2.09	58.56	+15.22
Central Station	4.35	+0.85	2.00	−0.96	1.24	−1.71	0.93	−2.46	2.56	−0.96											3.22	+0.74				
Cheat Bridge	6.45		4.54		2.34																2.95		2.92			
Cort'and	4.32		4.83		1.80		2.48		3.99		3.21		4.48		6.75		3.82		4.48		2.19		3.36		45.71	
Creston	4.57	−1.07	2.88	+0.20	1.54	−2.28	1.77	−2.41	3.89	+0.45	3.56	−0.62	4.24	+0.41	4.70	+1.57	5.84	+3.49	5.33	+2.73	3.56	+1.21	4.54	+1.22	46.42	+7.04
Davis	6.08		6.33		2.26		2.51		4.73		2.51		4.84		7.75		4.52		4.63		4.05		5.85		56.06	
Elizabeth	5.22		2.33		1.32		1.51		3.51		3.71		4.44		5.50		4.95		3.75		3.34		5.29		44.87	
Elkins	5.14	+1.80	2.62	−0.55	1.69	−2.38	2.28	−1.01	2.86	−1.12	2.45	−2.59	3.40	−1.24	6.21	+2.56	3.04	+0.17	4.42	+2.00	3.10	+0.24	4.04	+1.50	41.25	−3.62
Fairmont	5.41	+1.59	2.99	+0.02	1.34	−2.74	1.74	−1.89	5.61	+1.69	2.39	−2.28	4.12	−0.75	3.93	+0.56	2.99	+0.36	3.69	+1.15	2.17	−0.59	4.78	+1.39	41.16	−1.49
Glenville	4.80	+0.61	1.99	−1.84	1.25	−2.93	1.89	−1.96	3.00	−1.01	2.52	−2.98	4.85	−0.65	3.74	−0.20	4.68	+1.45	4.12	+1.26	3.53	+0.51	5.06	+1.36	41.43	−6.38
Grafton	6.11	+2.01	3.25	+0.02	0.72	−3.45	1.86	−1.99	5.45	+1.17	2.75	−1.88	2.98	−2.11	5.37	+1.37	5.49	+2.65	4.27	+1.51	4.03	+1.88	5.06	+1.49	47.34	+2.67
Lost Creek	5.32	+1.48	1.65	−1.40	0.75	−3.53	1.76	−1.76	3.80	−0.42	2.97	−1.07	3.07	−1.81	6.48	+2.37	2.42	−0.44	3.54	+1.10	3.37	+0.94	4.09	+0.58	39.22	−3.96
Mannington	5.30	+0.58	2.48	−0.02	1.43	−2.52	2.34	−1.90	4.91	+1.06	2.86	−1.09	3.13	−1.77	4.18	+0.67	3.62	+0.47	4.71	+2.20	2.66	+0.33	5.21	+1.74	42.83	−0.25
Morgantown	3.65	−0.31	1.53	−1.69	0.59	−3.30	2.91	−0.55	4.23	+0.64	1.85	−2.77	3.54	−1.76	4.37	+0.28	3.28	+0.77	4.39	+1.30	2.07	−0.84	4.43	+1.24	36.84	−6.99
Moundsville	3.56		2.46	+0.21	1.28	−2.45	1.30	−1.55	3.54	+0.34	5.73	+2.19	4.31		2.65		4.26		2.48	−0.46	2.68	−1.00	3.17	+0.20	37.42	
New Cumberland	3.50	+0.88	2.20	−0.36	1.28	−2.25					5.41	+0.85	3.88	−0.58	3.87	+0.67	2.08	−0.57	1.93	−0.82	2.43	+0.69	4.20	+1.61		
New Martinsville	1.96	+1.35	2.20	−0.82	1.28	−2.54	1.07	−2.52	3.90	+0.38	4.38	+0.54	4.47	−0.46	6.51	+3.52	4.92	+2.38	3.57	+1.03	3.29	+0.69	5.52	+1.98	46.07	+5.53
Parkersburg	3.68	+0.49	1.80	−1.44	1.42	−2.40	2.02	−0.89	3.47	+0.01	4.84	+0.19	4.21	−0.45	4.78	−1.25	4.19	+1.47	2.64	+0.20	3.32	+0.49	5.24	+2.47	41.61	+1.39
Parsons	5.54	+0.66	4.34	+0.98	3.20	−1.17	2.76	−1.19	4.28	+0.35	1.75	−3.96	4.60	+0.25	3.95	+0.25	4.75	+1.58	3.05	+2.21	3.26	+0.80	3.87	−0.11	45.35	+0.65
Philippi	6.18	+2.08	3.11	−0.24	1.81	−2.49	2.77	−1.31			2.17	−2.42	3.65	−1.55	5.60	+1.63	4.58	+1.42	2.80	−0.08	2.07	−0.87	5.33	+1.28		
Pickens	11.38	+5.09	5.98	+1.17	4.32	−1.07	2.89	−2.30	4.79	−0.22	5.07	−1.13	6.30	−0.06	6.10	+1.14	4.78	+0.98	4.43	+1.66	4.59	+0.81	7.19	+2.13	67.82	+8.21
Rowlesburg	5.22	+0.96	4.34	+1.06	1.76	−2.52	1.98	−2.12	6.85	+2.65	3.43	−1.49	5.32	+0.35	6.34	+2.50	4.32	+1.51	4.18	+1.37	3.42	+0.39	5.48	+1.69	52.64	+6.35
St. Marys	4.42		1.93		1.64		1.30		3.15		1.88		5.24		6.18		3.40		3.46		3.47		5.36		41.46	
Smithfield	4.73	−0.68	4.15	+0.83	1.47	−2.88	2.36	−1.74	6.40	+2.72	2.93	−1.59	7.22	+2.01	6.73	+2.75	3.74	+0.49	5.36	+2.28	3.70	+1.02	6.54	+2.58	55.33	+7.79
Terra Alta	6.88	+1.49	5.35	+1.54	3.68	−1.53											3.20	−0.43	3.30	−0.19	5.99	+2.79	6.11	+0.50		
Wellsburg	4.08	+0.63	2.00	−0.90	1.48	−1.95	1.48	−1.74	5.03	+1.63	4.65	+0.19	6.05	+1.40	2.85	−0.73	3.21	+0.35	2.82	+0.18	2.85	+0.90	3.92	+0.94	40.42	+0.90
Weston	2.78	−1.45	3.03	−0.72	2.24	−2.25	2.72	−1.57	3.64	−0.56	2.12	−2.49	6.26	+1.42	5.73	+1.92			2.66	−0.37			3.90	−0.19		
Wheeling	4.59	+1.54	2.77	+0.21	1.18	−1.93	2.60	−0.66	5.10	+1.67	4.07	−0.21	4.49	−0.18	3.50	+0.08	2.63	+0.07	2.67	−0.37	2.79	+0.38	4.51	+1.57	40.80	+2.60
SOUTHERN DIVISION.																										
Bancroft	5.00	+1.97	3.26	+0.31	1.97	−1.99	1.77	−2.31	4.29	+0.24	2.99	−1.57	3.75	−0.80	2.46	−2.40	5.33	+2.69	4.54	+1.70	3.91	+1.57	4.85	+2.07	44.12	+1.48
Beckley	5.60	+1.86	2.45	−0.69	0.75	−2.97	5.69	+1.78	5.55	+2.53	7.09	+3.05	4.72	+0.93			5.07	+2.14	2.26	−0.16	2.84	+0.38	4.00	+0.88		
Bluefield	2.17	−0.95	2.30	−0.83	0.90	−3.03	3.03	−0.38	3.01	−0.90	1.21	−3.94	4.18	−0.36	2.44	−2.20	2.48	−0.25	1.98	−0.80	2.55	+0.29	1.90	−0.89	23.15	14.24
Charleston	5.28	+1.29	2.77	−0.78	2.02	−2.28	1.74	−1.95	4.09	+0.19	2.22	−2.34	4.54	+0.48	2.71	−1.63	4.82	+1.90	4.35	1.74	4.12	1.22	4.66	+1.41	43.32	−0.75
Clay	4.86		3.60		2.40		1.45		3.56		4.14		5.14													
Cuba	3.68	+0.16	1.73	−1.08	0.53	−3.06	1.19	−2.21	3.57	+0.17	3.41	−0.31	3.30	−0.92	3.03	−0.07	4.34	+1.17	4.87	+2.10	3.21	+0.81	4.29	+0.86	37.06	−2.24
Dam 22 O. R.													4.00		3.66		2.74		4.97		3.50		4.97			
Dunlow			4.40												4.66		2.61		3.66		4.20					
Elkhorn	3.99	+0.87	3.38	+0.29	2.31	−2.14	2.62	−0.90	4.70	+0.57	1.26	−4.04	7.54	+2.09	2.66	−1.07	3.59	+0.79	1.76	−0.84	2.70	+0.07	4.35	+1.24	40.86	−3.07
Evans	5.14		2.21		1.55		1.29		5.05		5.44		5.32		3.67		3.97		5.08		4.05		4.09		46.86	
Green Sulphur Springs	3.24	+0.33	2.60	+0.16	1.40	−2.18	3.85	+0.63	3.00	−0.43	2.24	−1.89	3.30	−0.38	5.01	+1.93	4.09	+1.94	3.60	+1.72	2.85	+0.75	3.22	+0.68	38.40	+3.26
Hinton	4.46	+1.51	2.78	−0.28	1.99	−2.03	2.08	−1.22	3.21	−0.66	2.62	−1.53	3.34	−0.29	2.68	−1.01	2.92	+0.22	3.85	+1.49	2.17	−0.02	3.35	+0.55	35.45	−3.27
Holcomb	6.28		3.59		1.93		2.51		4.56		3.55		6.47		5.17		4.35		4.00		3.85		3.45		49.71	
Huntington	4.52	+0.88	2.23	−0.74	2.46	−2.04	2.03	−1.76	3.75	−0.19	4.87	+0.56	4.74	+0.24	4.59	+0.93	2.84	0.46	4.02	1.78	4.42	+1.80	6.22	+3.24	46.69	+5.16
Lewisburg	4.44	+1.03	2.94	−0.03	0.84	−3.19	2.13	−1.27	2.88	−0.90	4.07	−0.01	3.95	−0.05	3.65	+0.27	4.01	+1.31	4.66	+1.89	2.17	−0.31	2.92	+0.91	38.66	−1.25
Madison	6.73		2.93		2.66		4.02		6.42		4.35		6.19													
Marlinton	7.42	+3.97	4.16	+0.78	1.33	−2.66	1.86	−1.33	3.33	−0.60	4.46	−0.20	3.90	−1.02	4.20	−0.25	4.10	+1.08	4.47	+1.66	2.82	+0.01	4.18	+0.99	46.24	+2.43
Nuttallburg	3.25	+0.07	2.20	−0.62	1.30	−2.57	2.12	−1.20	4.73	+1.26	2.50	−1.80	5.70	+1.23	3.45	+0.18	7.18	+4.36	0.74	1.76	1.15	1.41				
Point Pleasant	4.30	+0.67	2.90	−0.71	1.68	−2.44	1.55	−1.82	4.30	−0.53	3.35	−1.10	3.89	−0.18	3.27	+0.04	3.53	+1.32	4.77	+2.35	4.33	+1.55	5.87	+2.75	43.74	+2.96
Powellton	4.29	+0.46	2.85	−0.15	2.55	−2.13	1.87	−1.98	4.00	+0.04	2.16	−2.54	2.55	−2.17	3.78	+0.65			3.57	+1.44	3.21	+0.61	4.00	+1.05		
Robertsburg	4.84	+1.05	2.40	−0.80	1.67	−2.43	1.15	−2.92	3.92	+0.44	4.05	+0.06	4.88	+0.98	4.46	+1.05	4.45	+2.09	4.83	+2.39	4.24	+0.87	4.89	+1.52	45.78	+4.30
Ryan	4.87	+1.02	3.26	0	1.44	−2.79	0.93	−3.14	3.72	+0.21	2.87	−1.36	3.88	−0.90	3.00	−1.13	6.82	4.12	4.78	+1.67	4.91	+2.68	5.30	−1.84	45.78	2.52
Spencer	3.97	−0.22	2.78	−0.34	0.86	−2.81	1.24	−2.27	2.93	−0.73	4.59	+0.31	5.18	+0.61	4.46	+1.08	4.02	+1.07	5.55	+2.68	4.17	+1.87	5.69	+2.45	45.44	+3.70
Sutton					0.90	−3.06	1.05	−3.31	3.98	−0.45	3.97	−1.90	5.72	+0.85	3.32	−0.55	4.83	+1.72	5.20	+2.30	2.96	+0.01				
Union	3.84	+0.14	3.49	−1.08	0.79	−3.07	0.69	−3.04	4.02	+1.49	1.97	−2.00	7.08	−2.70	3.55	−0.02	4.22	+1.76	2.70	−0.09	2.13	+0.10	1.90	−1.72	36.38	−1.63
White Sulphur Springs											4.92		3.21		2.86		3.89		3.28		1.93		4.43			
Williamson	5.38	+1.47	2.18	−1.03	2.20	−2.38	0.92	−3.34	4.12	+0.21	5.34	+0.52	4.79	+0.16	3.66	+0.20	3.28	−0.42	3.82	+1.39	2.98	+0.29	5.53	+1.72	44.20	−0.37

CHART SHOWING LOCATION OF OBSERVATION AND FORECAST DISPLAY STATIONS



TOTAL ANNUAL PRECIPITATION, 1915.



SCALE OF SHADES. INCHES.

Less than 30 | 30 to 40. | 40 to 50. | 50 to 60. | More than 60

COOPERATIVE STATIONS AND OBSERVERS

Station.	Observer.
Bancroft	R. E. Dent
Bayard	G. C. Dixon
Beckley	John A. Ewart
Beus Run	J. D. Riggs
Bluefield	Norfolk & Western Railway Co.
Brandonville	W. T. Miller
Buchannon	H. A. Darnall
Burlington	J. W. Vandiver
Cairo	Van. A. Zevely
Central Station	D. H. Doak
Charleston	C. V. Lewis
Clay	Prof. E. H. Knabenshue
Cortland	Samuel Harmon
Cheatbridge	Walter Cole
Creston	*J. M. Reed
Cuba	C. T. Perry
Dam 22, O. R.	U. S. Engineer Office
Davis	Ross C. Male
Dunlow	George Damron
Elizabeth	E. D. Ball
Elkhorn	J. J. Lincoln
Elkins	U. S. Weather Bureau
Evans	B. F. Sayre
Fairmont	*F. P. Hall
Franklin	William McCoy
Glenville	*M. T. Brannon
Grafton	Joseph Gerken
Green Sulphur Springs	Arthur George
Harpers Ferry	*S. W. Lightner
Hinton	*J. B. Lavender
Holcomb	R. C. Ferguson
Huntington	*L. H. Hutchinson
Lewisburg	George T. Argabrite
Logan	W. H. Oliver, Jr.
Lost City	B. D. Hinegardner
Lost Creek	Allen Smith
Madison	S. E. Bradley
Mannington	Jas. A. Morgan
Marlinton	S. L. Brown
Martinsburg	G. W. Van Metre
Moorefield	J. C. Fisher
Morgantown	Prof. Edgar L. Andrews
Moundsville	M. Z. White
New Cumberland	Frank S. Evans
New Martinsville	Wm. Ankron
Nuttallburg	Miss Donna Tully
Parkersburg	U. S. Weather Bureau
Parsons	J. W. Swisher
Philippi	Okey J. Robinson
Pickens	Dr. J. L. Cunningham
Piedmont	S. C. Lampert
Point Pleasant	*W. D. Holmes
Powellton	F. L. Evans
Robertsburg	E. C. Brace, Jr.
Romney	Geo. E. Arnold
Rowlesburg	*F. R. Proudfoot
Ryan	W. E. Ryan
Saint Marys	*J. O. Goodman
Smithfield	G. M. Whisler
Spencer	A. M. McKown
Sutton	Ben Gillespie
Terra Alta	C. F. Dodge
Union	J. M. Shanklin
Upper Tract	J. M. Mallow
Webster Springs	D. H. Hamrick
Wellsburg	C. P. Waugh
Weston	Miss C. M. Davis
Wheeling	*Miss M. B. Forsyth
White Sulphur Springs	J. M. Ayres
Williamson	*J. F. Keyser

* River Observer.

FORECAST DISTRIBUTORS AND DISPLAYMEN

[By Cards, Maps and Flags]

Station.	Distributor.
Bluefield—4	Norfolk & Western Railway Co.
Buckhannon*	Postmaster
Charleston—55*	Postmaster
Elkins—332†	Local Office, U. S. Weather Bureau
Grafton—59	Postmaster
Hinton—24	J. B. Lavender
Morgantown—20	Postmaster
Parkersburg—570†	Section Center
Point Pleasant—49	Miss Grace Henson
Ripley*	B. R. Parsons
Weston—39	Postmaster

Figures represent number of places supplied with forecast cards.

* Flag display station. † Forecast cards and maps.

[By Telephone Companies.]

Arbuckle & Ripley Tel. Co.
Barboursville Tel. Co.
Beverly & Marlinton Tel. Co.
Bluefield Tel. Co.
Central District Tel. Co.
Chesapeake & Potomac Tel. Co.
Citizens United Tel. Co.
Consolidated Tel. Co. of West Virginia.
Durbin Tel. Co.
Eastern Pendelton Tel. Co.
Enterprise Tel. Co.
Greenwood Tel. Co.
Peoples Tel. Co.
Ravenswood Tel. Co.
Union Ridge & Ohio Valley Tel. Co.

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JANUARY, 1916

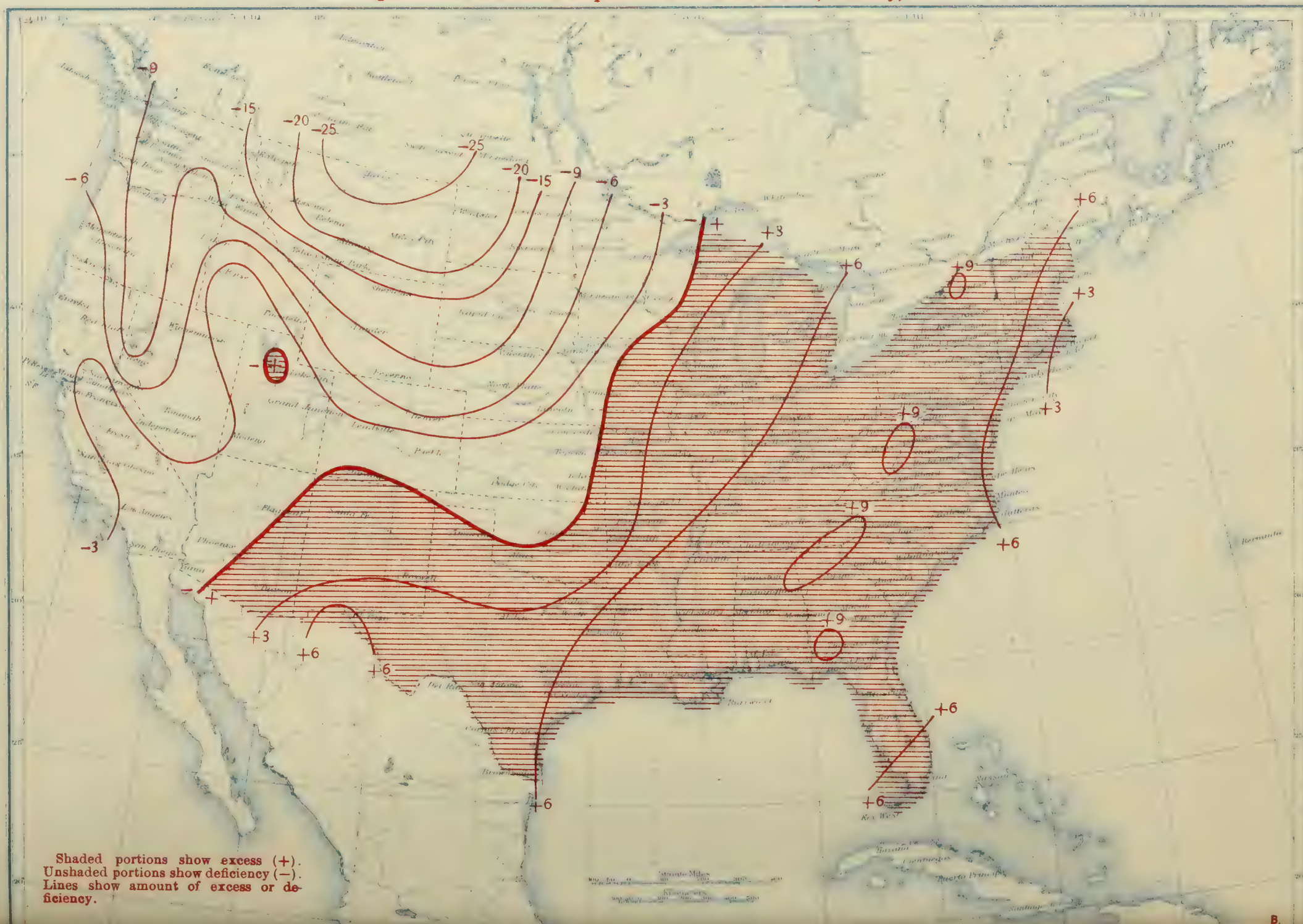
BY

HENRY C. HOWE

SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
FEBRUARY 21, 1916

Departure of the Mean Temperature from the Normal, January, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

B.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIV. PARKERSBURG, W. VA., JANUARY, 1916. NO. 1.

GENERAL SUMMARY.

The past month was the warmest January of record, except in 1913, and the precipitation averaged nearly one inch above the normal. The snowfall, however, was deficient, and the ground was bare nearly all the month, owing to frequent rains and high temperatures. The streams and smaller rivers reached high stages and the Ohio was nearly bankfull early in the month and during the second decade. The sunshine was above the normal, and the conditions were generally favorable for outdoor work.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.25 inches and 30.28 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.68 inches on the 8th, and 29.72 inches on the 5th. Elkins, 30.79 inches on the 8th, and 29.72 inches on the 5th.

TEMPERATURE.

The monthly mean for the State, 50 stations reporting, was 38.8°. The mean departure from the normal for 45 stations having ten or more years of record was + 6.2°. The month opened warm and the temperatures were also generally much above the normal on the 5-6th, 11-13th, and during the last decade, with the highest readings occurring on the 12th and 27th, when the January record was nearly equalled in most sections. Cold waves passed over the State on the 8-9th and 17-19th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 84 per cent; 8 p. m., 74 per cent. The January averages for the same hours for the past 27 years are 83 and 78 per cent, respectively. Elkins, 8 a. m., 84 per cent; 8 p. m., 74 per cent. The January averages for Elkins for the same hours for the past 17 years are 85 and 79 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 61 stations reporting, was 4.86 inches. The departure from the normal for 49 stations having ten or more years of record was + 0.97 inches. The precipitation was heaviest from the central western counties eastward over the mountain sections, including the Little Kanawha, Cheat, West Fork, and Tygarts Valley basins, and the northern portions of the Great Kanawha basin. The falls were lightest over the eastern panhandle and southern counties. Moderate to heavy rain fell on the 1st, 10-13th, 20th, 22d, and 28-30th, and light rain or light snow on several other days. The heaviest rain occurred on the 11-12th. In most sections the greater part of the snowfall was received on the 6-7th, but moderate amounts were received in many sections on the 16-17th.

RIVERS.

Excessive rains on the 11-12th caused flood stages in the Little Kanawha and West Fork rivers. The river at Weston reached a stage of 20 feet, causing considerable damage in the lower sections of the city and interrupting railroad travel. The crest stages at Glenville and Creston were 28.2 feet and 24.0 feet, respectively. The creeks were especially high in the vicinity of Spencer, where railroad travel was also interrupted. The highest stage during the month at Parkersburg was 32.8 feet on the 5th.

WIND.

The average wind velocity at Parkersburg was 6.6 miles per hour, or normal, as compared with the January average for the past 26 years. The average at Elkins was 4.7 miles per hour, or 0.3 mile below the January average for 17 years. The highest velocity at Parkersburg was 32 miles per hour from the west on the 13th, and at Elkins 28 miles per hour from the west on the 13th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 29 per cent of the possible amount, or 2 per cent above the January average for 18 years. The average at Elkins was 38 per cent, or 12 per cent above the January average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 8th, 9th, 21st, 23d, and 26th; Bayard, 1st; Charleston, 23d; Elkins, 7th, 8th, 9th, 12th, and 21st; Fairmont, 21st, 24th, and 26th; Grafton, 8th, 11th, 26th, and 27th; Green Sulphur Springs, 1st; Hinton, 12th and 27th; Holcomb, 10th, 11th, and 22d; Huntington, 8th, 12th, and 23d; Mannington, 27th; New Cumberland, 1st, 25th, 26th, and 27th; Pickens, 6th; Robertsburg, 8th, 9th, and 23d; Romney, 27th and 31st; Rowlesburg, 27th; Terra Alta, 10th; Williamson, 4th, 21st, 22d, 23d, and 26th.

Hail: Bayard, 1st.

Halo, lunar: Elkins, 12th and 15th; Pickens, 12th and 21st.

Halo, solar: Wellsburg, 6th, 12th, and 29th.

Haze, light: Bayard, 8th and 9th.

Sleet: Bayard, 16th and 29th; Glenville, 20th; Marlinton, 6th and 20th; Parkersburg, 20th; Romney, 10th; Terra Alta, 16th.

Thunderstorms: Evans, 1st; Green Sulphur Springs, 12th.

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	31.7	..	..	3.64	....	....	....	..	..	..
1892	29.4	76	3	3.15	....	....	....	..	..	..
1893	22.6	71	-25	2.49	....	....	....	7	7	17
1894	36.6	70	8	2.41	4.23	0.83	....	12	8	11
1895	25.0	69	-21	4.48	6.53	2.37	....	6	9	16
1896	32.4	72	6	1.57	2.72	0.67	1.8	9	14	8
1897	28.8	69	-18	1.70	2.85	0.90	4.0	10	7	14
1898	37.1	75	5	5.10	8.04	2.24	5.0	6	9	16
1899	32.1	70	-21	4.05	7.01	2.05	7.5	10	7	14
1900	34.5	74	10	2.24	3.60	0.82	1.9	9	8	14
1901	33.6	69	4	2.41	3.87	1.18	7.3	8	7	16
1902	30.2	64	-1	3.65	8.52	1.45	9.8	9	7	15
1903	31.8	79	-7	3.21	6.45	1.55	8.6	8	7	16
1904	27.5	72	-18	2.72	5.82	1.24	10.8	9	8	14
1905	26.4	70	14	3.15	7.43	1.48	22.0	7	7	17
1906	38.2	80	-5	3.79	8.70	1.36	5.1	11	7	13
1907	38.7	76	-15	6.41	11.54	2.35	5.6	6	7	18
1908	31.0	62	16	2.92	8.19	0.50	12.8	12	7	12
1909	36.8	76	5	3.41	6.59	1.50	8.7	8	6	17
1910	32.0	67	-5	5.68	10.10	2.52	15.4	6	6	19
1911	37.3	71	-5	5.86	12.63	3.11	7.0	8	6	17
1912	23.5	66	-34	2.60	6.93	1.10	13.6	7	8	16
1913	40.7	74	9	6.23	10.53	1.84	5.7	9	6	16
1914	35.8	83	11	3.18	5.65	1.55	15.6	7	6	18
1915	31.7	68	8	4.85	11.38	2.00	10.4	8	6	17
1916	38.8	79	10	4.86	8.52	1.70	6.1	11	7	13
Means and Extremes	32.5	83	-34	3.68	12.63	0.50	8.8	9	7	15

Climatological Data for January, 1916.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	14	36.0	+7.4	66	27	−8	17	40	5.39	+0.13	0.80	11.2	19	6	8	17	w.	G. C. Dixon
Burlington	Mineral	875	22	35.4	+4.4	70	27	−6	8	42	1.99	−0.61	0.75	4.0	5	9	14	8	w.	J. W. Vandiver
Franklin	Pendleton		10																	William McCoy
Harpers Ferry	Jefferson	244	27								1.70	−1.06	0.61	2.0	4				w.	S. W. Lightner
Lost City	Hardy		10	37.2	+2.9	67	21	−2	7	33	2.69	−0.51	0.80	6.0	6	11	4	16	w.	B. D. Hinegardner
Martinsburg	Berkeley	435	24	35.7	+5.0	72	27	3	9	40	2.05	−0.48			8	18	5	8	s.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20								2.73	+0.27	0.76		9	17[a]	9[a]	4[a]		M. S. Henkel
Piedmont	Mineral	919	0	36.0[a]		67	27	1[a]	17	32[a]	2.71		0.82	3.0	12	13	6	12	nw.	C. A. Suter, Jr
Romney	Hampshire	824	19	38.9	+8.1	75	27	−5	8	43	2.08	−0.68	0.50	5.0	10	10	11	4		Geo. E. Arnold
Upper Tract	Pendleton	1,230	18	40.8[a]	+8.5	70[a]	31	−5[a]	8†	40[a]	2.40	−0.22	0.75	7.0	8	12	11	8		J. M. Mallow
Averages and	Extremes			37.1	+6.0	75	27	−8	17	43	2.64	−0.40	0.82	5.5	9	12	9	10	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	40.0	+7.7	72	27	−1	17	45	5.69	+1.30	0.80	4.0	13	19	1	11		J. D. Riggs
Brandonville	Preston	1,809	6								6.27		1.16		12					W. T. Miller
Buckhannon	Upshur	1,411	20	39.4	+7.3	70	30	−3	8†	43	7.96	+3.61	1.20	10.0	15	11	4	16		H. A. Darnall
Cairo[a]	Ritchie	674	14	40.8	+6.3	76	29†	−4	18	45	6.20	+1.77	1.02	4.5	15	9	5	16		Van A. Zevely
Central Station	Doddridge	950	19	46.7[c]	+4.9	72[c]	12	2[c]	8	45[c]	2.71	−0.86	0.52	3.1	10	6[d]	6[d]	15[d]	s.	D. H. Doak
Cheat Bridge											5.70		1.14	11.2	12					
Cortland[a]	Tucker	3,300	1								5.97		1.50	7.0	9					Samuel Harmon
Creston[a]	Wirt	701	15	40.8	+6.9	73	27	0	8†	41	6.89	+3.32	2.09	7.6	18	8	3	20	w.	J. M. Reed
Davis[a]	Tucker	3,093	8								8.32		1.45	11.0	18	10	2	19	sw.	Ross C. Male
Elizabeth	Wirt	646	5								6.50		1.30		15					E. D. Ball
Elkins	Randolph	1,940	16	37.8	+8.8	72	12	−5	8	44	6.31	+2.97	1.51	8.3	16	4	8	19	w.	U. S. Weather Bureau
Fairmont	Marion	883	11	36.1	+1.9	75	27	−2	17†	47	4.84	+0.95	1.18	3.0	17	15	0	14	w.	F. P. Hall
Glenville	Gilmer	738	23	41.2	+8.1	76	12	−4	8†	54	6.96	+2.75	1.82	11.5	14	13	2	16		M. T. Brannon
Grafton	Taylor	1,000	24	43.0	+10.6	75	11	−1	17	44	5.84	+1.86	0.93	5.0	20	12	1	18	w.	Joseph Gerken
Lost Creek	Harrison	1,026	19	39.2	+6.2	74	12	−6	9	47	6.65	+3.46	0.80	8.0	16	12	1	18	w.	Allen Smith
Mannington	Marion	974	14	39.0	+7.4	71	27	−2	18	42	4.83	+0.07	0.88	2.3	19	7	6	18	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	24	38.8[d]	+6.5	70[d]	27	−3[d]	17	38[d]	2.75	−1.21	0.57	1.0	11	13[a]	0[a]	17[a]	s.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	14	41.8	+9.3	74	27	−1	17	46	3.89	+0.71	0.50	1.0	10	6	15	10	sw.	M. Z. White
New Cumberland	Hancock	987	19	34.3	+5.7	66	21	−6	17	42	4.14	+1.48	1.28	1.0	10	5	13	13	sw.	M. F. Smith
New Martinsville	Wetzel	634	23	39.2	+6.2	72	27	−1	17	41	5.70	+2.03	0.90		13	10	5	16	s.	Wm. Ankrom
Parkersburg	Wood	638	28	38.8	+7.4	74	27	−1	17	42	5.34	+2.15	1.13	3.2	17	8	5	18	se.	U. S. Weather Bureau
Parsons	Tucker	1,656	17	36.0	+4.2	70	27	−5	9	44	3.20	−1.06	0.80	8.0	7	14	5	12		J. W. Swisher
Philippi	Barbour	1,149	20	41.4	+8.7	75	12	−2	17	43	6.36	+2.17	0.85	4.5	17	9	14	8	w.	Okey J. Robinson
Pickens[a]	Randolph	2,697	14	39.7	+8.6	72	30	−9	18	50	8.07	+1.57	2.03	15.0	15	15	5	10	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	30								7.13	+2.93	1.78	0.9	17				nw.	F. R. Proudfoot
Saint Marys	Pleasants	577	8								4.15		0.90	2.0	13				e.	J. O. Goodman
Smithfield	Wetzel	835	11	37.0	+5.0	72	27	−1	17†	40	6.26	+0.91	0.94	3.0	16	11	8	12	nw.	G. M. Whisler
Terra Alta	Preston	2,612	16	31.2	+2.9	62	22	−8	8†	40	8.52	+3.02	1.76	7.8	13	16	4	09	w.	C. F. Dodge
Wellsburg	Brooke	1,225	16	36.2	+6.8	69	27	−4	17	42	2.66	−0.93	0.70	3.0	12	9	7	15	w.	C. P. Waugh
Weston	Lewis	1,026	21																	Miss C. M. Davis
Wheeling	Ohio	645	30	37.2		76	27	−1	17†	39	3.64	+0.54	0.65	1.4	18	11	4	16	s.	Miss M. B. Forsyth
Averages and	Extremes			38.5	+6.7	76	12†	−9	18	54	5.65	+1.45	2.09	5.5	14	11	5	15	w.	
Southern Division.																				
Bancroft	Putnam	574	12	38.9	+3.7	75	27	−2	17	47	5.28	+1.16	0.82	7.5	16	15	0	16	ne.	R. E. Dent
Beckley	Raleigh	2,440	16	42.6	+9.4	74	30	−6	17	46	5.67	+1.81	1.26	6.0	10	15	5	11	w.	John A. Ewart
Bluefield[a]	Mercer	2,558	21	43.2	+8.9	79	24	0	18	56	2.37	−0.66	0.80	4.0	6	15	3	12		Norfolk & Western Ry.
Charleston	Kanawha	597	13	44.5	+5.5	74	12	1	18	47	5.16	+1.45	0.92	9.0	16	13	0	18	w.	C. V. Lewis
Clay	Clay	706	0																	Prof. E. H. Knabenshue
Cuba ††	Jackson	650	14	40.6	+6.9	75	27	0	17	40	7.15	+3.82	1.60	5.0	15	6	13	12	nw.	C. T. Perry
Dam 22 O. R.	Jackson	538									6.45		2.23	5.8	14				w.	U. S. Engineer Office
Dunlow	Wayne	703	8	42.0		75	11†	0	8†	55	4.47		0.90	12.0	7	10	15	6	ne.	George Damron
Elkhorn	McDowell	1,933	23	46.0	+9.0	71	12	2	18	33	3.58	+0.43	0.89	5.0	8	8	14	9	w.	J. J. Lincoln
Evans	Jackson	606	0								6.76		1.79	5.5	14	12	3	16		B. F. Sayre
Green Sulphur Spgs	Summers	1,600	20	38.8	+5.8	72	12	−6	17	46	3.55	+0.59	0.90	9.0	8	17	5	9	n.	W. H. Gwinn
Hinton	do	1,450	19	37.6	+3.4	72	12	0	18	44	3.64	+0.63	0.70	8.0	14	10	4	17	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	37.1		71	30	−9	18	47	5.22		1.40	16.0	8	12	4	15		R. E. Ferguson
Huntington	Cabell	538	20	38.0	+5.0	70	27	3	17†	43	5.38	+1.70	0.90	7.0	14	11	5	15		L. H. Hutchinson
Lewisburg	Greenbrier	2,200	16	38.4	+6.1	66	12	−4	9	38	3.38	+0.10	1.10	11.0	7	4	13	14	nw.	Geo. T. Argabrite
Logan	Logan	687	13																	W. H. Oliver, Jr
Madison	Boone	704	10																	S. E. Bradley
Marlinton	Pocahontas	2,131	17	32.4	+3.4	60	12†	−10	8†	40	4.09	+0.35	1.00	10.5	13	7	16	8	sw.	S. L. Brown
Nuttallburg	Fayette	2,252	23											8.0		15†	8	2		Miss Donna Tully
Point Pleasant	Mason	553	23	40.0	+6.0	75	27	−4	17	48	7.18	+3.52	2.52	5.5	15	9	3	19	sw.	W. D. Holmes
Powellton	Fayette	933	20	43.4	+6.8	76	12	0	18	37	3.50	−0.35	0.86	12.0	9	10	11	10		S. C. Lampert
Robertsburg	Putnam	574	16	36.8	+2.5	74	27	−1	17†	54	5.80	+2.05	1.15	6.0	14	4	6	21		E. C. Brace, Jr
Ryan	Roane	709	13	38.6	+4.6	73	21	−7	8	49	5.35	+1.31	1.17	9.5	18	7	9	15		Wm. E. Ryan
Spencer	do	784	12	38.8	+4.4	75	12†	−5	8	50	6.61	+2.44	1.35	8.2	15	3	16	12		A. M. McKown
Sutton	Braxton	839	10																	Ben Gillespie
Union	Monroe	2,250	12	37.3[a]	+4.3	69[a]	12	2	17†	44[a]	3.15	−0.56	0.50	6.0	8					J. C. Shanklin
White Sulphur Springs	Greenbrier	1,940	6	38.3		70	12†	−3	9	50	3.73		0.61	1.0	9	19	3	9	sw.	J. M. Ayres
Williamson	Mingo	660	16	41.8	+5.6	76	31	7	17†	49	3.80	−0.21	0.65	2.0	15	13	5	13	w.	J. F. Keyser
Averages and	Extremes			39.7	+5.6	79	21	−10	8†	55	4.69	+0.93	2.32	7.6	12	11	7	13	w.	
State Averages and	Extremes			38.8	+6.2	79	21	−10	8†	55	4.86	+0.97	2.32	6.1	13	11	7	13	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for January, 1916.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac	.72	.25			.01	.23	.31			.10	.51	.80	.18	.05		.04	.08	.05		.41		.40				T.		.09	.43	.71	.02	5.39
Burlington	do	T.						.40			*	.75	T.								T.		T.							*	.84		1.99
Franklin	do																																
Harpers Ferry				do						.38			T.	T.	T	.61									.10									.61	1.70
Lost City	do						.60				.80									.44		.05						.70			.10	2.69
Martinsburg	do	.15				T.		.35		T.		*	.85								.05		.04							*	.61		2.05
Moorefield	do	.06						.55			.28	.76	.08								.10		.03							.43	.44		2.73
Piedmont	do	.07	.03				.07	.22			.05	.16	.38	.09	T.		T.	T.			.14	*	.82	T.			T.	T.		T.	.68		2.71
Romney	do		.15			*		.50		.04		.18	.37	.05							.06		T.							.25	.48		2.08
Upper Tract		T	.10					.75				.20	.20	.06								.15					T.			.54	.40		2.40
Northern Division.																																	
Bens Run	Ohio		.75			.59					.43	.65	.35	.10			.10	.16			.46		.28							.80	.61	.41	5.69
Brandonville				Monongahela	.52	1.16				.49				.54	.59	.47		.10						.54		.41				.28	.14		1.03		6.27
Buckhannon	do	1.05	.20			T	.60	.60			.20	.96	1.20	.40	T.		.25	.30			.50		.40				T.			.55	.65	.10	7.96
Cairo	Little Kanawha	.28	.02			.03	.64	.35			.40	.62	.74		.50		.06					.65						.08	.55	1.02		.26	6.20
Central Station	Middle Is. Creek	.11				.06	.32	.31			.17	.52	.21		T						.15						T.				.40	.46	2.71
Cheat Bridge					1.02				.45		.85			.32	.30	.34	.02			.15				.40		.50				.15			1.14		5.70
Cortland |||	Monongahela		.80					.70				.81	1.50	.16								.50							.32	.40	.78		5.97
Creston |||	Little Kanawha	.13	.38				.45	.45	T.		T.	.59	2.09	.62	.01	T.	.10	.30			.35	.02	.11	.10				.01	.02	.14	1.02		6.89
Davis |||	Monongahela	.15	1.44				.31	.45	T.		.25	.60	1.45	.29	.10		.10	.30			.24	.70	T.	.51				.04	.07	.49	.83		8.32
Elizabeth |||	Little Kanawha	.26	.35				.65			.39		.55	1.30	.55	.02		.14	.06			.47		.16						.11	.32	1.17		6.50
Elkins ***	Monongahela	.74				.21	.22	.48			.19	1.45	T.	.23	.02	T.	.16	T.	T.		.45		.23				.04		.11	1.30	.06	.42	6.31
Fairmont |||	do	.15	1.18				.35	.10	T.		.01	.42	.70	.40	T.	T.	T.	.09		T.	.06	.26	.03	.19				.14	.03	.22	.51		4.84
Glenville |||	Little Kanawha	.58	.30				.48	.62				.54	1.82	.50				.18	.14	.10	.50		.37							.23	.60		6.96
Grafton	Monongahela	.93	.20		.40	.02	.40	.06		.12	.60	.66	.10	.03			.05				.58		.25				.20	.02	.10	.30	.72	.04	5.84
Lost Creek	do	.75	.46			.46	.12	.45			.06	.80	.76	.62	T.		T.	.18			.24		.22				.06	T.		.72	.69	.06	6.65
Mannington	do	.88	.45			.09	.41	.07			.05	.46	.38	.33	.01		.03	.13			.28		.24				.02		.06	.25	.58	.11	4.83
Morgantown	do	.57	.40			.03		.08				.32	.49	.26				.10			.20										*	.30	2.75
Moundsville |||	Ohio	.50	.24			.20	T.				.22	.44	.48	.38				.10			.40		.25							.14		.48	3.89
New Cumberland	do	1.28			.20							.19	.42	.39		T.	T.	.10			.40		.08							T.	.86	.22	4.14
New Martinsville	do	.90	.41			.25	.20				.17	.70	.40	.45	T.						.60		.37								.45	.50	.30	5.70
Parkersburg ***	Ohio	.68	T.		T.	.27	.07	.09			.20	.83	.45	.14	.01		.06			.01	.42		.21				T.		T.	.15	.94	.22	.59	5.34
Parsons	Monongahela					T.	.65			.60					.15	.10						.65		T.						.80	.25		3.20
Philippi	do	.85	.34			.07	.52	.40			.04	.70	.76	.30			.07				.02		.22				.07	.68		.67	.55	.10	6.36
Pickens	do	2.03	.21				*	1.02			1.52	.12		.20			.20				.98		.55				.15		.10	.72	.15	.12	8.07
Rowlesburg				do	.02	1.78				.30	.30	.04	T.	T	.64	.78	.42	.01	T.	.08	.24		T.	.40	T	.30				.32	.20	.38	.92		7.13
Saint Marys				Ohio	.03	.51				.42		.16		T.	.52	.55		.20			.06		.20	T.	.20	.10						.30	.30		4.15
Smithfield |||	Fishing Creek	.94	.58				.58	.10	T.	T.	.04	.59	.56	.53	.06			.20					.31	.52				.07	.03	.35	.80		6.26
Terra Alta	Monongahela	1.76	.60				.24	.25			.20	1.25			.16	.02	T.	.30			1.10		1.12					1.30	.22			T.	8.52
Wellsburg	Ohio	.40	.10			.01					.14	.30	.51		T.		.20	.10			.02		.03								.70	.15	2.66
Weston				Monongahela																															
Wheeling				Ohio	.03	.53			.05	.22	T.			.08	.32	.54	.50	T.	T.	.05	.05			.04	.20	.09	.18				.01	.10	.65	.03	3.64
Southern Division.																																	
Bancroft |||	Great Kanawha	.63	.30				.40	.54				.37	.75	.76	.10		.17	.15			.37		.24	.10					.08	.10	.82		5.28
Beckley	do	1.26					.69	.40			.10	.30	.80	T.			.20						.60							.52		.75	5.67
Bluefield	do						.80	.12				.35						.40											.35	.35			2.37
Charleston |||	do	.04	.23				.49	.60				.40	.50	.42	T.	T.	.27	.24			.20	.32	.14	.26				.13		.12	.80		5.16
Clay				do																															
Cuba	Sand Creek	.20	.12			.04	.17	.30			.20	1.30	.40	.41			.20				.52		.15							1.40	.14	1.60	7.15
Dam 22 O. R. |||	Ohio	.16	.16			T.	.32	.38				.47	2.23	.55	.03	T.		.06			.44		.13						.05	.24	1.25		6.45
Dunlow	Big Sandy	.26				.65	.90				T.	.21					.70	.04					.52				T.	T.	.25			.78	4.47
Elkhorn	do	.72					.27	.89			.07	1.79	.65	.74			.11				.47		.21						T.	.80	.25	.32	3.58
Evans	Ohio	.50	.05			T.	.45	.30				.40	.20	.39			.10						.45							.90			6.78
Green Sulphur Spgs.	Great Kanawha	.40						.80																									3.55
Hinton |||	do	.20	.04				.22	.70	.34			.08	.64	.40	T.		T.	.10					.16	.08				.02	T.	.30	.36		3.64
Holcomb |||	do	.47				T.	.15	1.40				.52					.78				.25						T.		1	.40		1.25	5.22
Huntington |||	Ohio	.06	.42				.32	.60	T.			.36	.82	.90	T.		.08	.10			.30	T.	.20						.14	.18	.90			5.38
Lewisburg	Great Kanawha	.30					.20	1.10			T.	.24					T.						.57				.35			.56			3.38
Logan	Guyandotte																																
Madison |||	Great Kanawha						.10	1.00			.06	.48		.46		.05	T.				.18		.21				.42		T.	.82		.04	4.09
Marlinton	do	.18	.03																														
Nuttallburg	do						.10	1.00				.52	2.32	.66			.04	.13			.45	.07	.17	.07									7.18
Point Pleasant |||	Ohio	.04	.54				.38	.42																						.20	1.17		
Powellton	Great Kanawha	.12					.45	.80				.04		.23			.40				.20		.40							.86			3.50
Robertsburg				do		.35				.40	.50	T.		.35	.44	1.15	.60	T.	.10	.10			.25		.22	.22						.22	.84		5.80
Ryan	do	.24	.01			.01	.44	.65			.05	1.1	.10	.55	.02		.20	.10				.30	.45				.10			.61	.16	.15	5.35
Spencer |||	Little Kanawha		.72				.37	.62			.2	.44	1.35	.56	T.		.18	.20			.35		.55	.22				.06		.26	.41		6.61
Sutton |||	Great Kanawha																																
Union |||	do	.30					.35	.50				.40					.10						.50				.50			.45			3.15
White Sulphur Spgs.	do	.35					.20	.10				.61	.02										.45				.12	.40		.48			2.73
Williamson |||	Big Sandy	.22	.24				.38	.65	T.			.25	.32	.56	T.	T.	.18	.14					.20	.30				.02	.06	.10	.18		3.80

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

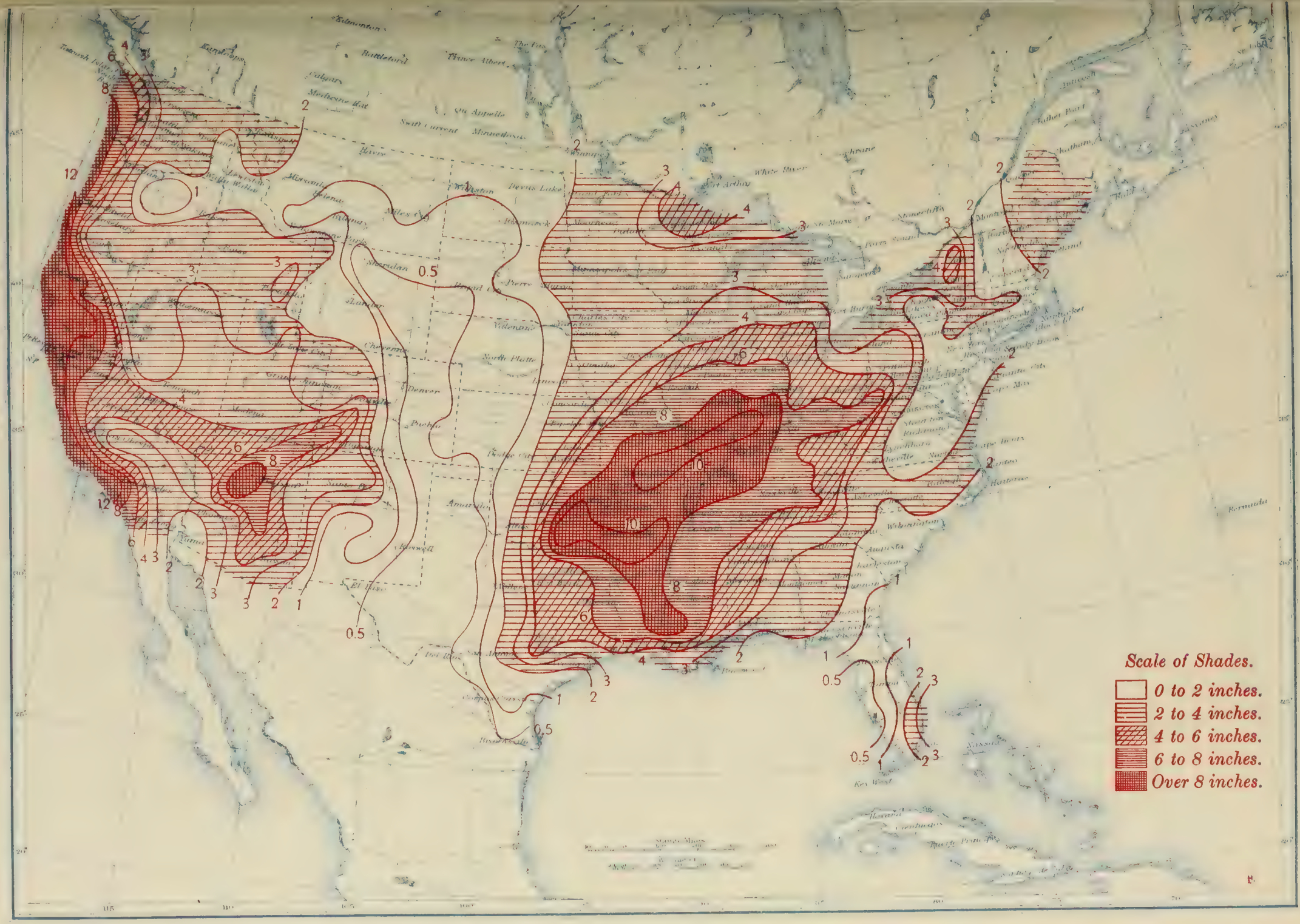
T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for January, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mea
Panhandle Division.																																	
Bayard	Maximum...	54	63	53	49	60	61	24	24	32	44	48	48	58	30	35	35	26	10	24	48	64	65	48	53	58	63	66	60	49	64	64	47
	Minimum...	29	45	24	18	31	21	18	-2	0	25	32	34	28	6	0	24	-8	-5	5	18	46	44	20	20	32	42	50	45	30	33	44	2-
Burlington	Maximum...	56	65	48	48	68	63	36	25	25	39	43	40	47	29	27	41	29	23	33	38	66	62	49	53	61	67	70	64	49	45	56	47
	Minimum...	28	47	29	18	26	27	7	-6	-5	19	34	36	27	15	7	20	5	7	16	25	29	34	25	17	21	32	40	47	35	35	36	27
Martinsburg§	Maximum...	45	66	42	46	61	36	30	26	31	42	45	43	50	26	28	43	17	26	35	40	65	62	51	49	60	68	72	65	41	43	70	4
	Minimum...	31	34	35	25	25	35	26	12	3	5	31	36	35	20	13	15	7	7	9	18	32	33	36	23	24	28	40	50	34	34	36	28
Piedmont	Maximum...	56	63	50	44	62	61	32	26	27	41	45	43	43	34	28	37	33	18	31	37	63	58	50	50	56	58	67	60	51	47	62	46
	Minimum...	31	49	29	22	30	29	21	5	6	23	35	35	28	15	9	23	1	3	13	24	34	36	32	20	25	35	45	42	36	34	..	25
Romney	Maximum...	49	73	58	47	68	72	35	30	27	38	43	44	49	40	45	41	42	25	36	38	70	66	60	54	66	71	75	74	59	50	74	52
	Minimum...	28	41	30	18	30	30	23	-5	-3	20	34	35	35	8	18	21	4	2	15	24	30	50	33	17	23	35	39	52	34	35	38	25
Upper Tract	Maximum...	64	66	57	49	68	64	38	27	32	47	47	41	57	34	40	39	23	..	38	49	66	64	63	56	60	65	66	66	58	60	70	52
	Minimum...	32	55	31	18	36	33	23	-5	-5	23	36	35	32	6	25	3	3	..	10	25	42	50	52	33	20	42	52	53	34	38	40	29
Northern Division.																																	
Bens Run	Maximum...	63	55	55	53	60	50	38	34	31	48	49	68	65	20	30	39	23	19	31	42	69	63	49	63	59	67	72	66	52	65	64	50
	Minimum...	46	37	31	22	49	32	11	23	12	38	40	36	20	14	10	22	-1	9	8	25	32	40	27	25	33	38	44	46	38	50	50	29
Buckhannon	Maximum...	55	61	48	52	62	60	32	30	40	48	49	72	65	25	36	40	28	19	27	53	67	65	45	58	61	65	69	62	55	70	68	51
	Minimum...	34	45	31	18	45	27	20	-3	-3	32	37	40	25	14	10	27	0	0	4	24	33	44	27	23	28	38	39	50	43	50	54	27
Creston	Maximum...	57	64	51	55	65	60	35	31	41	49	59	69	67	37	33	41	30	24	31	50	70	59	51	61	64	65	73	69	63	72	68	53
	Minimum...	34	51	31	18	38	29	23	0	2	35	38	37	26	15	9	29	0	0	1	27	30	38	25	23	35	36	43	52	43	48	50	27
Elkins	Maximum...	59	62	38	54	64	44	31	31	40	50	49	72	62	19	39	39	16	16	31	53	67	62	46	60	62	63	68	63	49	71	69	50
	Minimum...	32	33	25	17	44	24	8	-5	-4	35	36	38	19	9	6	16	-3	3	7	22	34	37	25	20	40	40	47	45	43	46	49	27
Fairmont§	Maximum...	63	60	35	53	59	35	33	31	45	48	41	65	36	17	40	34	12	19	33	41	71	55	53	68	63	66	73	59	52	70	66	48
	Minimum...	34	40	30	18	19	27	27	7	6	8	36	36	36	14	9	13	2	-2	7	9	32	33	25	21	22	32	38	42	36	39	50	23
Glenville	Maximum...	60	65	60	50	68	67	40	35	42	48	51	76	71	40	34	43	32	25	36	47	75	75	55	68	69	67	75	75	65	74	72	56
	Minimum...	32	55	22	14	40	29	25	-4	-2	23	38	37	28	16	9	30	-2	-4	-1	24	22	41	22	14	28	35	33	47	44	49	53	25
Grafton	Maximum...	55	63	60	64	68	46	33	44	50	56	75	68	66	42	34	40	31	19	30	44	74	70	52	68	68	70	72	74	68	73	74	56
	Minimum...	32	52	19	44	27	27	2	4	38	37	42	40	26	14	8	30	-1	1	7	24	36	50	26	24	28	41	43	52	40	42	55	29
Lost Creek	Maximum...	56	63	49	55	63	58	31	29	37	47	49	74	65	26	33	41	28	18	32	50	71	67	51	65	66	58	71	66	53	72	68	52
	Minimum...	30	49	30	15	43	26	21	-5	-6	30	39	35	26	14	6	28	-2	-1	5	23	32	48	25	18	26	34	41	51	38	50	53	26
Mannington	Maximum...	55	63	49	48	59	59	33	35	40	47	48	67	67	25	31	40	29	19	30	43	69	66	49	62	61	66	71	65	49	69	65	50
	Minimum...	30	49	31	16	35	26	23	11	11	32	37	36	25	15	8	29	-1	-2	2	22	31	36	24	20	28	35	42	49	37	49	52	27
Morgantown	Maximum...	53	61	49	49	50	57	31	31	..	..	47	63	64	25	27	38	30	16	26	44	68	66	50	60	61	67	70	66	47	..	..	48
	Minimum...	34	48	28	19	47	23	21	10	..	..	35	36	25	14	8	27	-3	1	10	21	44	50	28	30	43	53	55	46	30	..	..	29
New Cumberland	Maximum...	57	60	38	48	55	35	30	30	38	43	45	65	60	22	30	32	8	15	25	38	66	56	48	49	58	65	62	62	47	65	64	45
	Minimum...	31	35	25	16	32	15	13	8	11	35	31	30	18	11	5	14	-6	1	3	19	37	39	26	8	29	35	36	36	32	39	46	22
New Martinsville	Maximum...	53	53	45	43	62	58	40	38	44	54	55	70	66	30	30	54	25	20	32	40	42	52	48	52	56	62	72	64	54	66	65	49
	Minimum...	33	34	29	20	30	26	30	16	16	42	37	31	25	15	12	22	-1	4	9	25	34	38	36	23	31	37	43	45	38	50	54	28
Parkersburg	Maximum...	61	63	38	55	62	39	34	30	41	50	41	69	57	18	32	38	14	20	27	51	70	61	47	61	58	66	74	58	53	69	65	49
	Minimum...	38	38	27	23	39	25	24	12	10	38	37	37	15	13	12	14	-1	5	10	24	40	37	27	28	40	41	51	41	40	52	42	28
Parsons	Maximum...	60	62	47	47	62	55	56	32	28	40	46	48	69	64	26	36	37	28	14	29	37	65	65	48	61	63	70	65	62	49	69	49
	Minimum...	29	29	27	16	19	24	22	14	-5	4	33	35	35	25	11	3	27	-2	-2	4	20	30	36	25	18	28	35	33	45	40	37	22
Philippi	Maximum...	55	66	52	54	64	64	33	30	45	49	55	75	68	28	34	40	30	15	30	51	70	62	52	63	64	72	65	70	56	73	68	53
	Minimum...	36	47	28	20	47	25	23	-1	2	37	36	40	25	13	7	27	-2	-1	7	22	44	47	28	25	40	50	50	50	40	48	52	29
Pickens	Maximum...	54	57	40	51	61	52	51	39	44	46	55	68	58	37	..	37	32	19	41	48	67	59	52	62	68	60	71	57	58	72	64	52
	Minimum...	35	39	21	18	43	24	8	4	6	30	35	47	8	2	..	22	-6	-9	-1	27	39	35	25	25	37	49	53	45	45	48	46	26
Terra Alta	Maximum...	50	52	45	40	45	42	30	32	35	41	40	41	42	28	32	33	28	10	20	50	55	62	50	52	50	48	51	48	47	50	48	41
	Minimum...	32	32	20	19	24	20	-2	-8	12	29	33	34	15	9	4	20	-8	-5	6	20	20	32	22	22	33	34	33	34	34	36	34	29
Wellsburg	Maximum...	50	59	38	44	55	53	28	28	39	45	45	65	60	18	25	31	16	14	23	44	62	60	43	54	55	64	69	63	46	64	61	45
	Minimum...	33	37	26	19	42	17	17	12	17	36	32	32	18	12	8	16	-4	4	8	21	44	35	29	28	36	45	52	34	33	43	47	26
Weston §.	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wheeling §	Maximum...	62	51	36	55	58	34	38	34	46	48	40	68	29	19	36	35	14	20	34	42	70	66	54	63	65	66	76	56	55	68	64	48
	Minimum...	34	40	31	21	24	23	22	15	15	12	36	35	28	12	11	16	-1	-1	10	12	33	33	27	25	26	38	48	48	37	38	55	25
Southern Division.																																	
Beckley	Maximum...	70	72	58	58	64	56	33	35	45	60	65	70	57	51	50	49	18	28	60	65	64	68	64	52	70	69	69	70	70	74	68	58
	Minimum...	33	34	20	21	34	27	25	7	8	22	31	42	12	11	20	3	-6	5	28	37	38	28	31	28	38	50	51	50	48	46	32	27
Bluefield	Maximum...	55	61	61	59	59	57	35	39	..	51	58	69	63	37	34	40	10	21	39	59	79	62	51	53	63	63	62	61	57	64	67	53
	Minimum...	44	44	37	23	44	33	31	24	..	21	45	55	35	14	12	32	1	0	5	30	44	50	29	29	40	54	55	53	41	39	39	33
Charleston	Maximum...	60	65	55	60	68	63	57	52	48	52	53	74	70	64	59	55	49	48	48	53	72	70	64	64	67	63	73	71	69	73	23	61
	Minimum...	36	44	33	23	23	30	27	9	7	17	39	40	35	17	13	17	6	1	6	8	30	33	30	28	28	33	41	47	47	48	50	27
Elkhorn	Maximum...	55	61	58	59	62	60	37	39	44	54	64	71	70	42	38	40	36	25	38	56	70	70	57	55	66	64	66	65	62	67	66	55
	Minimum...	42	55	34	26	36	35	34	27	27	38	52	56	41	18	18	36	6	2	5	36	39	57	30	34	44	51	54	56	46	44	51	36
Green Sulphur Spgs.	Maximum...	52	59	55	57	63	61	40	37	42	40	42	72	69	32	30	34	33	30	34	45	68	62	52	54	64	63	68	65	60	64	70	52
	Minimum...	34	45	27	17	17	31	27	7	-2	27	32	38	28	14	8	25	-6	-2	-2	19	25	47	24	20	28	50	47	46	40	40	36	25
Hinton §	Maximum...	63	66	47	50	65	40	35	35	37	48	46	72	49	26	31	30	15	25	36	48	66	55	50	53	65	60	69	67	52	51	60	48
	Minimum...	36	40	33	20	21	32	30	20	12	13	33	38	41	18	12	15	5	0	5	8	28	28	28	24	24	32	46	47	49	42	46	26
Holcomb §.	Maximum...	60	47	40	64	60	58	34	36	46	48	58	46	44	26	30	39	11	21	40	42	68	63	54	61	64	67	70	63	66	71	68	50
	Minimum...	31	37	24	17	20	18	20	2	5	11	36	37	38	10	5	10	-4	-9	-4	2	31	34	36	25	34	40	43	46	48	50	42	23
Huntington §	Maximum...	64	57	43	55	65	34	32	27	48	52	43	67	29	20	40	35	13	23	33	50	67	55	45	59	62	66	70	62	59	70	64	48
	Minimum...	37	49	33	24	25	30	25	10	9	9	27	39	29	15	15	18	3	3	11	11	32	36	27	28	28	35	42	50	45	45	56	27
Lewisburg	Maximum...	56	63	53	49	59	56	38	32	34	43	48	66	63	33	27	36	35	21	33	43	64	60	50	51	62	59	64	61	57	61	65	49
	Minimum...	33	49	31	19	26	32	29	11	4	20	40	40	32	12	8	25	0	-1	9	25	27	50	25	22	29	45	42	47	40	38	36	27
Madison §	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marlinton	Maximum...	52	56	40	40	54	42	34	29	30	36	42	60	52	28	22	32	24	16	30	34	56	56	46	45	50	46	58	55	48	56	60	42
	Minimum...	28	40	26	14	24	30	22	10	10	16	32	32	28	10	4	20	-2	-2	0	24	23	46	22	16	22	36	40	40	36	36	36	21
Point Pleasant	Maximum...	57	63	49	58	63	60	33	34	40	50	49	69	68	20	29	38	24	25	32	51	73	63	51	65	61	69	76	67	56	71	67	52
	Minimum...	34	46	29	20	45	24	22	7	5	33	36	36	20	11	10	22	-4	4	6	25	30	42	21	24	32	33	44	50	40	49	52	27
Powellton	Maximum...	63	63	56	48	68	66	35	31	45	55	63	76	67	33	38	41	30	23	33	60	70	62	56	58	67	68	72	70	61	70	74	55
	Minimum...	40	51	33	23	40	33	27	7	8	36	44	43	31	16	12	30	4	0	6	29	33	39	30	29	39	41	52	54	50	41	46	31
Robertsburg§	Maximum...	65	60	42	60	65	35	33	35	46	50	42	70	30	20	42	35	15	24	34	55	71	55	54	65	65	66	74	60	57	72	65	50
	Minimum...	32	42	27	18	19	26	23	0	0	2	37	36	28	13	11	15	-1	-1	0	1	30	31	24	24	25	31	38	44	42	43	55	23
Ryan	Maximum...	58	65	51	59	67	64	32	33	45	50	48	70	66	24	32	40	28	24	26	40	73	70	44	55	60	60	72	65	55	70	67	52
	Minimum...	32	41	24	16	33	26	16	-7	4	36	38	36	24	14	7	14	-3	0	0	6	32	36	24	23	30	46	43	49	45	48	54	25
Spencer§	Maximum...	65	62	44	60	70	33	34	32	48	50	55	75	35	20	42	35	15	24	35	53	75	57	55	66	67	59	65	65	57	74	70	51
	Minimum...	31	41	28	16	30	29	24	-5	-2	32	38	31	31	15	8	20	-2	2	-2	24	30	45	24	22	34	35	41	50	44	49	52	26
Union §	Maximum...	58	64	45	52	62	45	37	35	48	50	60	69	43	35	34	37	12	21	40	52	65	56	50	45	62	60	65	65	49	65	..	49
	Minimum...	34	35	31	19	25	35	20	18	6	18	28	38	41	15	10	15	2	2	4	10	21	35	29	23	30	40	38	40	38	39	43	25
White Sulphur Spgs.	Maximum...	58	61	57	54	62	59	34	33	31	41	49	70	62	32	29	33	30	21	37	49	69	62	55	52	63	62	67	65	57	68	70	51
	Minimum...	34	53	32	11	23	34	29	10	-3	20	40	42	32	9	8	12	2	0	6	21	19	50	23	11	28	42	39	45	40	37	31	25
Williamson §	Maximum...	66	64	49	58	68	35	32	34	47	55	48	75	37	26	39	38	17	26	38	58	75	56	52	61	70	63	73	66	65	74	76	52
	Minimum...	36	43	32	25	26	35	30	20	20	26	43	43	37	18	18	23	7	7	7	9	32	34	33	31	31	35	45	49	54	49	50	30

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY
APR - 7 1916

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

FEBRUARY, 1916

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MARCH 24, 1916

Departure of the Mean Temperature from the Normal, February, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

S

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIV. PARKERSBURG, W. VA., FEBRUARY, 1916. NO. 2.

GENERAL SUMMARY.

February was somewhat colder and much wetter than usual. Nearly equal amounts of rain or snow were received during the ten-day periods, with a favorable precipitation distribution over the State. The snowfall also averaged about 4 inches above the normal and the ground was well covered in most sections during the cold periods of the month. There were no destructive storms.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.14 and 30.12 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.77 inches on the 14th, and 29.51 inches on the 26th. Elkins, 30.74 inches on the 14th, and 29.47 inches on the 26th.

TEMPERATURE.

The monthly mean for the State, 48 stations reporting, was 31.4°. The mean departure from the normal for 43 stations having ten or more years of record was —0.7°. The month opened seasonably warm and the temperatures were considerably above the normal on the 6th, 11-12th, 17th, 20th, and 22d-24th, with the highest readings occurring generally on the 22d. Cold weather prevailed on the 7-8th, 13-16th, 19th, and after the 24th, with the lowest temperatures on the 14-15th, when the early morning readings ranged generally from near zero to 12° below zero.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 84 per cent; 8 p. m., 77 per cent. The February averages for the same hours for the past 27 years are 83 and 76 per cent, respectively. Elkins, 8 a. m., 84 per cent; 8 p. m., 76 per cent. The February averages for Elkins for the same hours for the past 16 years are 84 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 63 stations reporting, was 4.30 inches. The departure from the normal for 50 stations having ten or more years of record was + 1.31 inches. The precipitation was heaviest over the central and northern mountain sections and was also considerably above the normal over the southern half of the State. The monthly amounts were somewhat below the normal in sections of the two panhandles and Wood county. The month opened rainy and from 1 to 10 inches of snow fell on the 2d and 3d. Light rain or snow occurred in most sections on the 6th, 7th, and 8th, moderately heavy rain of snow on the 12th and 13th, scattered showers or light snows on the 18th and 19th, and light to moderate rain or snow daily during the last week of the month.

RIVERS.

Heavy rain on the 12-13th and 25th caused marked rises in the Little Kanawha and West Fork rivers. The following crest stages were noted in the Little Kanawha river on the 13th: Glenville, 22.5 feet; Creston, 20.6 feet.

WIND.

The average wind velocity at Parkersburg was 7.3 miles per hour, or normal, as compared with the February average for the past 26 years. The average at Elkins was 5.1 miles per hour, or 0.4 mile below the February average for 15 years. The highest velocity at Parkersburg was 34 miles per hour from the northwest on the 26th, and at Elkins 26 miles per hour from the west on the 27th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 30 per cent of the possible amount, or 7 per cent above the February average for 19 years. The average at Elkins was 34 per cent, or 1 per cent above the February average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 4th; Bayard, 8th, 18th, 21st, 24th, and 25th; Buckhannon, 23d; Charleston, 9th; Davis, 1st, 9th, 24th, and 25th; Grafton, 5th, 6th, 10th, 11th, 12th, 17th, 23d, and 24th; Green Sulphur Springs, 23d; Mannington, 12th; Pickens, 1st, 9th, and 22d; Robertsburg, 4th; Smithfield, 12th and 23d; Wheeling, 14th, 15th, 16th, and 22d.

Halo, lunar: Elkins and Pickens, 15th; Wheeling, 17th.

Halo, solar: Upper Tract, 27th; Wellsburg, 4th.

Haze: Bayard, 10th.

Sleet: Bancroft, 13th; Bayard, 9th and 24th; Charleston, 18th; Elkins, 25th, Marlinton, 2d and 9th; Nuttallsburg, 26th; Parkersburg, 8th; Piedmont, 9th; Romney, 25th; Smithfield, 9th, Terra Alta, 25th and 26th; Wheeling, 8th and 12th.

Smoke: Bayard, 17th, 22d, and 23d.

Solar eclipse was observed generally throughout the State on the morning of the 3d.

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	38.1	..	..	5.39	....	....	....	..	..	..
1892	37.1	72	12	2.30	....	....	....	..	..	..
1893	35.0	71	6	4.81	6.70	1.65	....	..	..	..
1894	33.4	74	5	3.99	7.48	2.05	....	9	7	12
1895	22.8	79	17	1.27	2.44	0.61	....	10	9	9
1896	33.4	62	5	3.31	6.23	1.50	....	7	8	14
1897	36.8	70	3	5.95	8.18	4.00	....	7	7	14
1898	32.7	74	13	1.84	3.38	0.64	....	10	8	10
1899	26.1	69	35	4.32	6.43	2.25	19.0	7	5	16
1900	30.7	83	11	3.94	5.62	2.31	10.1	5	10	13
1901	27.1	62	6	0.86	1.66	0.10	4.1	8	8	12
1902	26.7	68	14	3.20	5.65	1.33	8.1	6	7	15
1903	35.3	74	19	5.99	9.59	2.58	8.6	10	6	12
1904	29.3	80	13	2.37	4.55	0.52	8.1	12	9	8
1905	25.6	56	22	2.34	4.65	0.80	8.1	8	6	14
1906	32.4	79	11	1.60	3.34	0.46	8.1	15	6	7
1907	31.1	68	23	2.55	4.83	0.67	11.1	9	8	11
1908	30.9	72	10	3.72	6.26	1.77	15.8	7	8	14
1909	40.4	80	5	4.16	7.68	1.44	2.4	7	8	13
1910	31.5	72	11	3.18	6.56	0.98	13.5	9	8	11
1911	38.7	76	6	2.03	3.92	0.40	4.8	8	8	12
1912	27.3	70	17	2.45	5.08	0.72	6.4	10	8	11
1913	32.6	80	1	2.27	6.15	0.21	4.7	13	6	9
1914	28.4	70	22	3.64	6.96	1.63	19.7	9	7	12
1915	38.4	72	2	3.07	6.33	0.90	3.6	10	5	13
1916	31.4	72	12	4.30	9.19	1.79	13.2	8	6	15
Means and Extremes	32.0	83	35	3.26	9.59	0.10	9.5	9	7	12

Climatological Data for February, 1916.

Stations.	Counties.	Elevation. Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	14	26.8	−0.5	60	22	−8	14	43	4.48	+1.04	1.04	16.8	16	2	5	22	w.	G. C. Dixon
Burlington	Mineral	875	22	31.4	+1.4	56	1†	4	14	38	2.00	−0.30	1.00	12.0	5	0	22	7	w.	J. W. Vandiver
Franklin	Pendleton		10																	William McCoy
Harpers Ferry	Jefferson	244	27								3.52	+0.94	0.85	5.0	7				w.	S. W. Lightner
Lost City	Hardy		10																	B. D. Hinegardner
Martinsburg	Berkeley	435	24	30.2	+0.4	56	20	4	14†	42	3.05	+0.59	1.32	9.0	6	14	7	8	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20								2.01	−0.63	0.50	14.0	8	20	4	5		M. S. Henkel
Piedmont	Mineral	919	0	31.4		64	22	0	14	44	1.79		0.57	9.5	9	6	9	14	nw.	C. A. Suter, Jr
Romney	Hampshire	824	19	33.2	+1.8	64	1	−1	14	46	2.80	+0.56	1.22	12.0	9	5	14	10	w.	Geo. E. Arnold
Upper Tract	Pendleton	1,230	18	35.4[b]	+1.3	67[a]	22	−10[b]	14	43[b]	2.18	+0.48	0.65	10.0	6	9	9	11	w.	J. M. Mallow
Averages and	Extremes			31.1	+0.9	67[a]	22	−10[b]	14	46	2.73	+0.38	1.32	11.6	8	8	10	11	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	31.3	−0.1	63	22	0	15	38	4.86	+1.65	1.05	21.0	12	18	3	8		J. D. Riggs
Brandonville	Preston	1,809	6								4.39		1.06		6					W. T. Miller
Buckhannon	Upshur	1,411	20	31.4	+0.3	63	22	−1	14	37	5.81	+2.03	1.06	13.5	13	8	7	14		H. A. Darnall
Cairo	Ritchie	674	14	29.1[a]	−3.7			−6[a]	14											Van A. Zevely
Central Station	Doddridge	950	19								3.60	+0.69								D. H. Doak
Cheat Bridge											5.14		1.15	24.0	13					
Cortland	Tucker	3,300	1								4.10		1.90	11.0	7					Samuel Harmon
Creston	Wirt	701	15	33.2	+0.6	66	22	−3	14	42	5.82	+3.13	1.58	11.3	14	4	3	22	w.	J. M. Reed
Davis	Tucker	3,093	8								6.64		2.42	25.0	14	5	3	21	sw.	Ross C. Male
Elizabeth	Wirt	646	5								4.44		1.28		14					E. D. Ball
Elkins	Randolph	1,940	16	29.4	−2.2	63	22	−6	14	41	4.02	+0.73	1.58	17.3	16	3	4	22	w.	U. S. Weather Bureau
Fairmont	Marion	883	11	27.7	−5.2	65	22	−5	14	51	5.06	+2.09	1.54	10.0	11	13	0	16	w.	F. P. Hall
Glenville	Gilmer	738	23	34.2	+2.1	69	22	−2	14	45	6.82	+3.14	1.80	12.5	16	8	5	16	w.	M. T. Brannon
Grafton	Taylor	1,000	24	33.1	+1.8	65	22†	−5	14	40	6.31	+3.17	1.00	18.0	12	8	3	18	nw.	Joseph Gerken
Lost Creek	Harrison	1,026	19	30.8	+0.3	66	22	−8	14	45	5.01	+2.02	0.86	11.2	12	6	5	18	w.	Allen Smith
Mannington	Marion	974	14	30.2	−0.3	64	22	−12	14	42	5.32	+2.88	0.91	13.7	15	7	5	17	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	24	29.8	−1.5	62	22	−6	14	37	4.87	+1.70	0.85	13.2	14	5	5	19	.	Prof. Edgar L. Andrews
Moundsville[a]	Marshall	642	14	31.2	−0.4	67	17	−7	15	48	2.37	+0.15	0.80	11.0	6	5	14	9	nw.	M. Z. White
New Cumberland	Hancock	987	19	25.6	−1.8	58	22	−9	14	45	2.27	−0.26	0.56	12.8	14	3	13	13	nw.	M. F. Smith
New Martinsville	Wetzel	634	23	30.4	−1.6	58	11	−6	14	34	4.46	+1.48	1.05		9	7	7	15	s.	Wm. Ankrom
Parkersburg	Wood	638	28	30.0	−4.1	64	22	0	15	36	2.75	−0.60	1.39	8.9	14	4	9	16	nw.	U. S. Weather Bureau
Parsons	Tucker	1,656	17	30.6	+1.3	65	22	−6	14	58	4.24	+0.83	1.41	16.0	10	8	4	17		J. W. Swisher
Philippi	Barbour	1,149	20	31.2	−0.2	63	22	−6	14	41	4.18	+0.84	0.80	9.0	9	7	10	12	w.	Okey J. Robinson
Pickens[a]	Randolph	2,697	14	29.8	−2.0	62	22	−10	14	45	9.19	+4.64	1.21	36.0	16	7	5	16	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	30								5.46	+2.15	1.72						nw.	F. R. Proudfoot
Saint Marys	Pleasants	577	8								4.90		1.43	9.5	12				w.	J. O. Goodman
Smithfield	Wetzel	835	11	28.0	−3.2	63	22	−8	14	47	6.19	+2.79	1.97	14.5	12	8	7	14	nw.	G. M. Whisler
Terra Alta	Preston	2,612	16	25.4	−2.4	51	12	−9	14†	37	6.02	+2.19	1.65	17.2	9	11	7	11	w.	C. F. Dodge
Wellsburg	Brooke	1,225	16	25.8	−1.4	55	22	−5	14	33	2.81	−0.27	0.62	10.0	9	4	9	16	w.	C. P. Waugh
Weston	Lewis	1,026	21	30.2	−1.2	66	22	2	4†	46	6.38	+2.66	1.50	17.4	15	9	10	10	sw.	Miss C. M. Davis
Wheeling	Ohio	645	30	28.2		65	22	−7	14†	51	3.60	+1.04	1.06	14.0	15	8	6	15	sw.	Miss M. B. Forsyth
Averages and	Extremes			29.9	−1.1	69	22	−12	14	58	4.90	+1.69	2.42	15.4	12	7	6	16	w.	
Southern Division.																				
Bancroft	Putnam	574	12	31.8	−1.8	70	22	0	14†	46	3.91	+0.94	0.85	9.8	15	02	1	16	nc.	R. E. Dent
Beckley	Raleigh	2,440	16	39.0		72	12	1	14	46	4.11	+1.01	1.44	11.5	10	9	5	15	w.	John A. Ewart
Bluefield	Mercer	2,558	21	35.2	−1.7	62	22	4	14†	36	3.35	−0.25	0.85	15.0	9	15	1	13		Norfolk & Western Ry.
Charleston	Kanawha	597	13	38.7	+0.4	69	23	5	14	30	4.93	+1.40	0.85	7.2	13	13	2	14	w.	C. V. Lewis
Clay	Clay	706	0								4.23		0.85	11.0						Prof. E. H. Knabenshue
Cuba ††	Jackson	650	14																	C. T. Perry
Dam 22 O. R.	Jackson	538									3.91		1.22	8.5	14					U. S. Engineer Office
Dam 26 O. R.											3.12		1.29							
Dunlow	Wayne	703	8																	George Damron
Elkhorn	McDowell	1,933	23	37.2	+1.5	65	22	6	14	41	4.09	+0.99	1.32	21.0	12	4	9	16	w.	J. J. Lincoln
Evans	Jackson	606	0								3.07		1.04	7.0	13	12	1	16		B. F. Sayre
Green Sulphur Spgs.	Summers	1,600	20	32.8	+0.6	66	22	3	14	42	5.05	+2.51	0.80	17.0	12	11	2	16	n.	W. H. Gwinn
Hinton	do	1,450	19	32.5	−1.4	64	22	7	14†	49	4.00	+0.95	1.33	5.0	14	10[a]	1[a]	17[a]	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	29.2		65	22	−3	14	44	3.51			31.0	12	7	2	20		R. E. Ferguson
Huntington	Cabell	538	20	32.2	0	66	22	5	14†	41	4.59	−1.40	1.29	7.7	14	11	1	17		L. H. Hutchinson
Lewisburg	Greenbrier	2,200	16	35.2	+1.5	68	17	2	14	37	3.57	+0.60	0.67	5.5	12	8	3	18	nw.	Geo. T. Argabrite
Logan	Logan	687	13																	W. H. Oliver, Jr
Madison	Boone	704	10																	S. E. Bradley
Marlinton	Pocahontas	2,131	17	28.8	−0.5	56	22	2	14	36	3.51	+0.09	0.68	6.5	12	3	19	7	sw.	S. L. Brown
Nuttallburg	Fayette	2,252	23								3.40	+0.61	0.60	28.0	10	8	2	10		Miss Donna Tully
Point Pleasant	Mason	553	23	32.6	−0.6	65	22	−4	14	43	3.87	+0.29	0.77	8.0	16	11	3	15	sw.	W. D. Holmes
Powellton	Fayette	933	20	35.7	+0.5	69	22	5	14	38	4.06	+1.15	1.00	7.0	7	7	11	11		S. C. Lampert
Robertsburg	Putnam	574	16	29.6	−3.3	66	22	−3	14	46	4.15	+1.00	1.38	7.0	11	7	2	20		E. C. Brace, Jr
Ryan	Roane	700	13	31.6	−1.6	70	22	−5	14	46	5.70	+2.42	1.55	14.5	17	6	7	16		Wm. E. Ryan
Spencer	do	784	12	34.0	+0.7	70	22	−5	14	45	3.69	+0.59	0.90	11.7	9	2	18	9		A. M. McKown
Sutton	Braxton	839	10								6.81	+3.65	2.47	17.4	9					Ben Gillespie
Union	Monroe	2,250	12	31.8[a]	1.5	65[a]	22	4	14	50[a]	3.40	+0.30	0.95	6.0	6					J. C. Shanklin
White Sulphur Springs	Greenbrier	1,940	6	34.2		66	22	3	14	44	3.38		0.60	5.5	11	16	4	9	sw.	J. M. Ayres
Williamson	Mingo	660	16	34.8	−1.3	69	22	10	14†	44	4.56	+1.36	1.00	13.0	15	12	5	12	w.	J. F. Keyser
Averages and	Extremes			33.4	−0.5	72	12	−5	14	50	4.08	+1.17	2.47	11.7	12	9	5	15	w.	
State Averages and	Extremes			31.4	−0.7	72	12	−12	14	58	4.30	+1.31	2.47	13.2	11	8	6	15	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing: for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for February, 1916.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
ayard	Potomac	.35	.21	.05	T.	T.	.42	.41	T.	.15			1.04	.71					.27	.17	.03			T	.12	.21	.18	.14		.07			4.48
rlington	do		.60										*	1.00											.30		T.	T.		.10			2.00
anklin	do																																
rpers Ferry	do	.34	.68	.10									T	.80	.60									T.	.85	.15			T.			3.52
st City	do																																
rtinsburg	do	.08	.70				.07						*	1.32					J.						.88	T.		T.		T.			3.05
orefield	do	.12	.50				.06						.30	.40											.13	.45				.05			2.01
dmont	do		.46	T.			.11	T		.06			.57	T.						T.					.20	.20	.05	.12		.02			1.79
mney	do	.08	.70				.07						.40	.82					T.					.18	.18	.27				.10			2.80
per Tract		.15	.60	T.			T.							.50					T.						.10	.65		T.	T.	.18			2.18
Northern Division.																																	
ns Run	Ohio	.22	.45				.27			.32			.95	1.05					.18		.10				.45	.60	.17	.10					4.86
andonville	Monongahela		.72					.85	.49										1.06		.62					.65							4.39
ckhannon	do	.80	.50		T	.35	T.	T	.50				1.06	.20					.55		.10			T.	.50	.75	.30	.10		.10			5.81
iro	Little Kanawha																																
ntral Station	Middle Is. Creek	.30	.40	T.			.22	T.	T.	.15			.37	.25						.13				*	*	*	*	*	1.72				3.60
eat Bridge		.85		.65				.45	.10		.10			1.15	.10					.40					.14		.30	.20	.40	.30			5.14
rtland	Monongahela	.49	.60					.53						1.90						.08						.30				.20			4.10
eston	Little Kanawha	.70	.49	.10	T.		.30	T.	.26	.05			.78	1.58	T.				T.		.06			.05	.11	.96	T.	.42		.05			5.82
vis	Monongahela	.56	.35	.15			1.04	T.	.05	.12			J.	2.42	.10			J.	.40			T.		T.	T.	.35	.15	.55	.20	.20			6.64
izabeth	Little Kanawha	.60	.20	.07			.34		.18				.80	1.28	.05									.01	.03	.80	.04	.63	.01				4.44
kins ***	Monongahela	.05	.50	T.	T.	T.	.38	.02	.02	.12			1.32	.31					.39	.03		T.		.04	.40	.27	.16	.10	T.	.01			4.02
irmont	do	.80	.43	.10	T.		.27	T.	.22				.13	1.30	.06				T.	.11	T					1.54	T.	.05	T.	T.			5.06
nville	Little Kanawha	.82	.30	.30			.20	.05		.57			.96	.96	.25				.08					.05	.04	1.80		.20	.10	.15			6.82
afton	Monongahela	.60	.65	.16			.30	.04		.62			.80	1.60					.35						.72	.84	.10	T.					6.33
st Creek	do	.65	.38	T.			.61	.04		.54			.69	.82					T.	.08	T.			T.	.86	.55	.13	.12		T.			5.01
nnington	do	.64	.47	.02			.19	.07		.17			.91	.82					.04	.12	.01				.86	.87	.09	.04	T	T.			5.32
rgantown	do	.75	.60	.05			.15	.07		.20			.60	.80					.04	.03					.51	.85	.03	.08	T.	T			4.87
undsville	Ohio	.47	.20											.80										.05	.15	.70	T.	T.					2.37
w Cumberland	do	.27	.20	.03		T.	.07		T.	.02			.08	.80					.05	T.				.56	.16	.38	.03	.02	.10	T.			2.27
w Martinsville	do	.37	.34			T.	.23		T.				.87	.92					.07		.10				.50	1.05							4.46
arkersburg ***	Ohio	.01	.28	T.		T.	.25		.05	.12			1.18	.34					.04	T.				.04	.33	.03	.04	.03		.01			2.75
rsons	Monongahela	T	.10			T.		.75	.40				1.41	.20					.15					T.	.38	.04	.40	.40		T.			4.23
ssippi	do	.80	.66							.42			.70	.70					.07						.54	.10	.20						4.18
ckens	do	.08	.50	.20			1.21	.50		.53			.88	1.00						.30	.20			.37	1.19	.83	.60	.60		.20			9.19
wlesburg	do	.62	.34	.16	T.			.40	T.	.42	.14		T.	1.72	.06					.36	T.				.80	T.	.24	.06					5.46
nt Marys	Ohio	.75	.20	.14			1.	.34		.23			.38	1.40				T.		.20	.05			T.	.04	1.05	T.	.08		T.			4.30
thfield	Fishing Creek	.70	.30	.10				.39		.26			.23	1.60	.12				T.	.20	T.				1.97	.10	.10		T.			6.19
rra Alta	Monongahela	T.	.70	.02			1.18						1.60	.12					.08							1.15	.50	.62					6.02
llsburg	Ohio	.24	.30	T.		T.		T.		.20			.62	.40					.10		T.			T.	.35	.40	.20						2.81
ston	Monongahela	.90	.40	.10				.50		.20			.20	1.50	.10				.10	.18				T.	.04	.80	.10	1.30	.10	.06			6.38
eeling	Ohio	.55	.14	.11	T	T.		.18	T.	.38			.02	.80	.02					.13	.02	T.		.02	.02	1.06	.02	.08	T.				5.60
Southern Division.																																	
ncroft	Great Kanawha	.58	.40	.10			.17	.17		.40			.33	.80						.02				.10	.08	.46	.09	.08		.08			3.91
ckley	do		.48	.05			.50						.97	.20										1.44	.40	.10	.20	.20					4.11
uefield	do		.10							.80				.90						.40				.50	.50	.30	.30			.10			3.35
arleston	do	.85	.60	.08			T.	.20		.60	T.		.20	.68	T.				T.	.50				T.	.82	.52	.12	.15		.16			4.93
ay	do	.78	.50				T.	.30		.30	T.		T	.60	T.				T.	T.					.85	.25	.40		.20			4.23
iba	Sand Creek	.55	.30				.52			.20			1.00	.60					.10	T.				.06	.20	.28	T.	.20					4.01
am 22 O. R.	Ohio	.74	.20	.07			.09	.17		.19			.55	1.22					T.	.06				.03	.08	.45	T.	.02		.01			3.31
am 26 O. R.	do		.15				.24			.15	T.		.52	1.20										.03	.14	.50		.20		.10			3.12
mlow	Big Sandy																																
khorn	do	1.32	.35	.15			T.			.12				.20						.30				.32	.23	.25	.10	.60	.15				4.09
vans	Ohio	.45	.35				.18	.09	.06				.19	1.04										.11	.17	.33	T.	.07	.03	.02			3.07
een Sulphur Spgs.	Great Kanawha	.60	.40					.80					T.	.20				.30	.30	.40				.35	.50	.60		.40		.20			5.05
inton	do	.4	.60	.16				.04		T.	.44			.08	.05					.24				.02	.22	1.33	.04	.16	T.	.16			4.00
lcomb	do		*	.33			*	.30		.22			1.	.40					.40					T.	*	*	*	1.50		.06			3.51
untington	Ohio	.90	.40	.04			.10	.42		.28			.30	1.29	T.					.18				.08	.24	.58		.04		.04			4.59
wisburg	Great Kanawha	.56	.60	.10			.00	T.		.48				.90					.11	.10				.30	.55	.61	T.	T.	T	.20			3.57
gan	Guyandotte																																
adison	Great Kanawha																																
arlinton	do	.47	.68	T.			.18	T.		.28			.12	T.					.08	T.	T.			.12	.63	.50	.05	.10	T.	.30			3.51
ttallburg	do	T.			.20		T.			.60				.40						.60				.20	.10	.30	.30	.30	.40			3.40
int Pleasant	Ohio	.77	.32	.06			.04	.20		.16			.68	.50	.04					.09				.02	.15	.58	.04	.08	.02	T.			3.87
wellton	Great Kanawha	.70	.50							.55														1.00	1.00	.05				.20			4.06
bertsburg	do	.64	.40	T.	T.		T.	.32		.23	T.		.10	1.38	T.					.09				.14	.40	.05	.10						4.15
van	do	1.01	.60	.02			.15		.02	.61			.50	1.30						.15	.04			.04	.40	.42	.08	.01	.06	.04			5.70
ncer	Little Kanawha	.7	.04					.70		.41			.47	.90						.13				T.	.12			.20					3.69
tton	Great Kanawha	1.	.66	.10					.74	.20	.10							T.			T.				2.47	.10	.64						6.81
nion	do									.75				1.					T.					.30	.80	.20	T.		.40				3.40
nite Sulphur Spgs.	do	.50	.45				.05	T.		.58				.48					.08	.10				.20	.55	.60	T.			.30			3.38
illiamson	Big Sandy	1.40	.90	.10			.10			.50	.08			.40	.05					.18				.04	.36	.60	.06	.08		.05			4.50

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‡ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

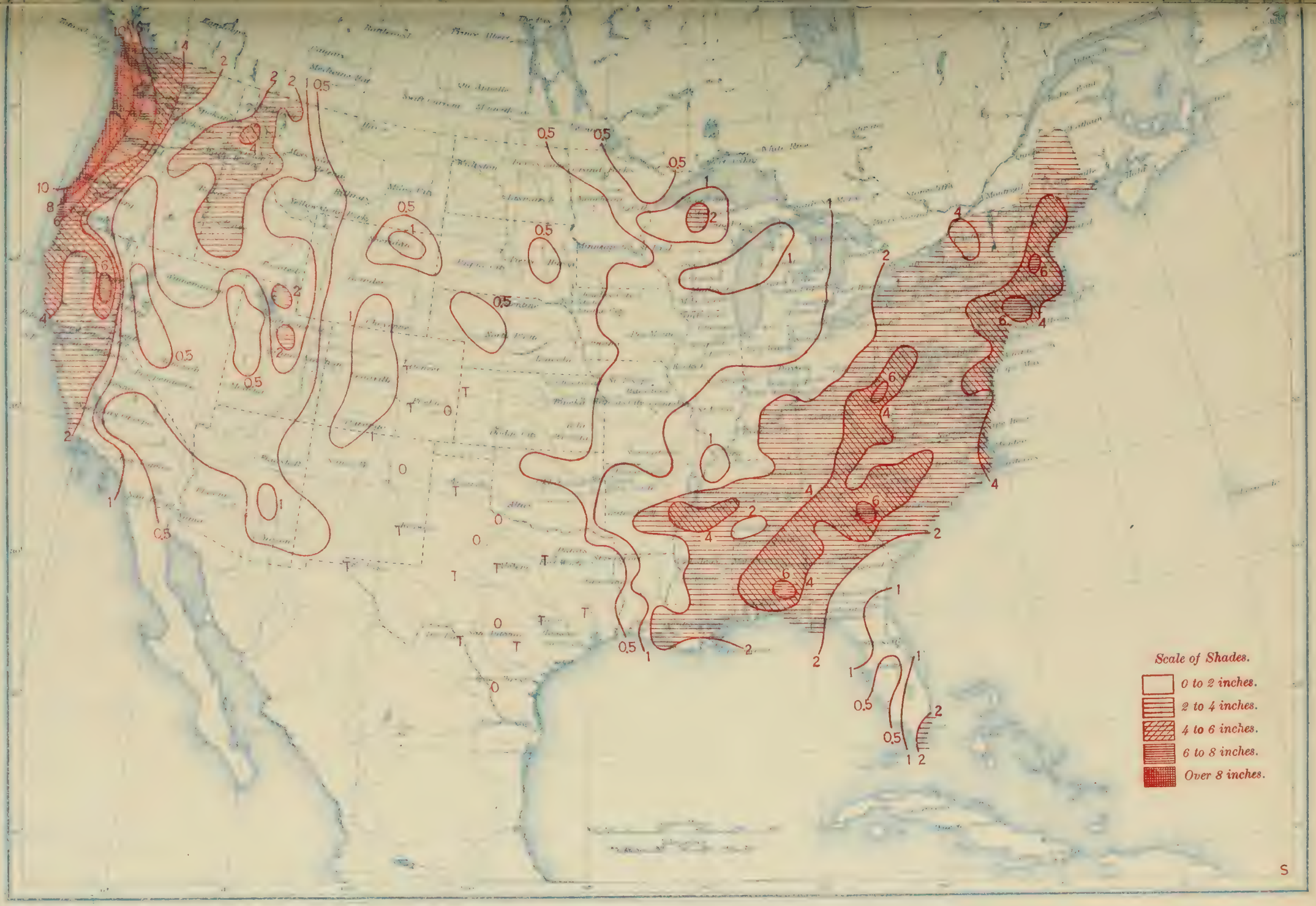
T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for February, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mea
Panhandle Division.																																	
Bayard	Maximum	61	31	22	23	36	47	41	31	43	32	56	54	50	14	26	36	45	51	31	48	47	60	56	46	31	27	25	18	25	..	..	38.
	Minimum	28	19	7	9	17	23	10	2	22	22	24	35	8	8	0	15	29	26	0	13	10	17	27	26	21	12	8	5	12	..	..	15.
Burlington	Maximum	56	38	29	33	44	43	46	28	45	42	52	37	38	25	36	46	54	52	32	55	44	55	56	48	36	35	31	30	36	..	..	41.
	Minimum	31	25	17	17	14	27	17	10	25	35	29	27	15	4	5	19	37	27	12	27	18	17	29	29	29	25	19	16	20	..	..	21.
Martinsburg§	Maximum	47	29	26	36	39	47	43	34	40	46	47	34	29	21	33	43	50	54	32	56	34	51	53	35	38	38	30	35	38	..	..	39.
	Minimum	39	27	21	18	17	22	27	12	15	29	30	29	27	4	4	4	17	35	14	14	18	17	23	34	30	30	22	18	19	..	..	21.
Piedmont	Maximum	57	38	28	32	43	40	42	32	38	39	50	44	30	30	35	41	50	45	38	52	43	64	54	38	33	32	27	28	36	..	..	40
	Minimum	38	25	15	16	18	30	32	9	24	28	30	30	28	0	9	21	35	38	9	23	15	20	34	28	32	25	16	12	20	..	..	22.
Romney	Maximum	64	43	35	35	39	46	43	38	43	45	52	53	43	25	35	47	53	54	46	57	57	54	57	53	40	37	37	34	35	..	..	44.
	Minimum	40	25	18	16	17	29	24	9	23	23	30	36	20	−1	2	18	38	32	10	22	11	17	30	30	28	27	18	15	20	..	..	21.
Upper Tract	Maximum	63	38	25	28	45	50	47	..	46	47	60	60	57	31	37	48	57	55	37	56	54	67	64	52	34	28	31	31	31	..	..	45
	Minimum	36	22	16	10	15	30	21	..	..	26	24	35	20	−10	−1	14	38	35	9	21	23	24	40	30	26	18	18	15	15	..	..	21.
Northern Division.																																	
Bens Run	Maximum	50	32	25	31	43	44	43	32	34	39	56	49	42	22	31	40	50	41	32	50	41	63	55	45	40	40	30	34	34	..	..	40.
	Minimum	32	22	18	10	22	30	17	9	30	27	31	35	14	2	0	10	37	31	11	28	18	25	37	39	32	26	20	14	21	..	..	22.
Buckhannon	Maximum	53	30	25	30	40	45	44	36	44	39	58	54	54	19	30	49	53	50	34	52	49	63	61	48	39	32	26	28	34	..	..	41.
	Minimum	30	23	15	3	21	28	19	10	33	30	27	34	17	1	4	13	38	34	9	17	19	26	35	38	28	24	18	13	19	..	..	21.
Creston	Maximum	55	36	27	32	44	45	45	33	36	42	60	56	55	25	34	42	55	61	38	57	55	66	54	49	46	36	32	31	35	..	..	44
	Minimum	35	23	18	3	18	28	21	10	30	28	27	33	21	−3	1	10	32	33	12	29	25	24	35	41	33	28	20	10	16	..	..	22
Elkins	Maximum	50	29	21	30	42	45	40	40	39	40	59	55	48	18	32	42	52	42	26	53	45	63	50	47	33	26	19	24	31	..	..	39
	Minimum	29	21	12	15	22	29	12	8	31	28	26	32	7	−6	1	13	37	16	7	25	20	29	34	32	26	19	14	11	18	..	..	19
Fairmont§	Maximum	39	25	24	32	41	43	30	36	36	39	58	49	21	19	34	41	54	43	33	51	42	65	50	41	33	31	24	33	39	..	..	38
	Minimum	36	21	15	8	8	23	30	9	10	28	28	30	17	−5	−3	1	10	35	5	6	13	14	24	39	31	25	17	11	12	..	..	17
Glenville	Maximum	58	38	26	36	47	46	47	35	45	44	64	60	57	28	37	46	59	55	41	61	59	69	67	49	45	36	30	32	38	..	..	46
	Minimum	35	15	15	2	18	27	22	10	32	31	26	32	20	2	2	11	31	33	12	28	25	24	31	42	32	27	20	10	16	..	..	21
Grafton	Maximum	60	50	30	32	41	44	52	36	39	40	52	64	50	24	34	42	54	50	48	54	53	65	65	48	42	37	42	39	35	..	..	45
	Minimum	35	22	16	10	20	29	20	9	32	20	28	33	17	−5	1	12	35	35	9	22	14	25	35	38	18	27	12	12	16	..	..	26
Lost Creek	Maximum	54	34	24	29	43	44	44	33	43	40	58	54	54	20	33	42	56	51	34	55	47	66	61	48	37	32	27	28	35	..	..	42
	Minimum	33	22	15	0	15	25	19	8	31	28	25	32	17	8	4	8	35	34	8	23	17	21	34	27	29	24	18	12	11	..	..	19
Mannington	Maximum	54	34	25	31	42	43	43	31	36	37	56	55	50	19	32	40	53	46	35	51	44	64	57	48	36	33	27	27	34	..	..	40
	Minimum	34	21	16	3	17	26	19	8	30	28	28	31	18	−12	−6	6	35	34	6	24	13	22	33	36	29	26	18	8	14	..	..	19
Morgantown	Maximum	55	33	23	28	40	44	42	32	36	36	54	52	48	17	29	37	47	43	32	48	41	62	59	46	35	29	25	26	33	..	..	39
	Minimum	33	19	14	11	21	28	18	5	29	27	28	44	15	−6	0	14	32	32	6	21	10	25	45	33	27	24	16	12	16	..	..	26
New Cumberland	Maximum	47	32	24	28	38	38	29	26	32	35	51	46	32	22	31	36	45	39	28	38	34	58	57	40	38	32	23	29	34	..	..	36
	Minimum	27	17	13	5	21	22	10	−2	22	18	21	30	9	−9	−3	12	13	23	6	20	4	15	35	31	25	22	15	9	10	..	..	15
New Martinsville	Maximum	42	35	23	30	42	47	45	32	35	37	58	48	43	24	32	40	50	42	30	42	40	48	48	42	40	35	30	30	35	..	..	38
	Minimum	34	21	17	9	22	29	18	9	30	26	26	35	18	−6	−2	7	35	30	9	28	15	34	35	37	30	27	19	14	28	..	..	24
Parkersburg	Maximum	42	27	25	30	45	44	35	32	34	40	58	48	32	16	29	41	50	42	30	55	36	64	56	44	35	30	26	27	34	..	..	38
	Minimum	27	21	18	11	25	33	13	10	31	28	31	32	10	0	0	10	37	18	12	30	21	28	40	35	30	24	20	16	23	..	..	24
Parsons	Maximum	52	32	29	41	42	44	36	41	38	58	57	53	52	52	31	40	50	40	31	51	46	63	45	46	35	28	25	24	32	..	..	41
	Minimum	31	25	6	14	26	16	8	32	29	25	24	27	14	−6	1	10	33	31	6	20	19	22	19	33	26	22	15	11	18	..	..	19
Philippi	Maximum	56	35	25	29	41	45	45	35	45	38	58	55	57	20	33	39	50	49	35	54	47	63	62	54	34	30	25	25	30	..	..	41
	Minimum	32	10	14	6	19	30	19	8	32	28	28	40	16	6	0	15	33	32	6	21	15	27	44	34	27	23	15	13	15	..	..	24
Pickens	Maximum	47	35	25	29	37	46	40	41	41	47	62	52	50	30	47	..	42	51	41	25	57	62	47	45	36	35	37	37	25	..	..	41
	Minimum	25	25	9	5	22	22	10	2	29	25	28	36	8	10	2	..	13	23	25	2	16	35	38	36	23	19	10	7	18	..	..	17
Terra Alta	Maximum	50	32	22	36	40	48	40	28	36	45	45	51	38	28	28	31	38	22	27	38	42	44	44	42	38	32	22	23	28	..	..	35
	Minimum	32	20	10	4	18	26	12	0	15	25	35	38	12	9	0	11	14	−9	0	10	24	30	23	20	24	18	10	6	15	..	..	15
Wellsburg	Maximum	47	26	22	25	38	37	31	28	32	32	49	44	32	16	25	35	41	37	25	48	38	51	48	38	34	29	24	19	31	..	..	33
	Minimum	26	18	14	9	21	28	9	4	22	22	24	32	7	−5	1	14	35	14	5	25	7	22	33	34	27	24	16	11	16	..	..	17
Weston§	Maximum	41	28	22	34	44	48	34	42	44	52	62	60	22	18	32	44	56	42	46	56	44	66	55	52	48	40	28	30	42	..	..	42
	Minimum	34	22	14	2	14	20	28	9	14	16	18	28	20	2	2	10	16	24	8	18	18	20	35	42	44	22	10	8	15	..	..	18
Wheeling§	Maximum	44	28	28	35	42	41	24	37	34	38	60	40	28	21	34	42	53	40	37	44	37	65	42	42	38	36	27	31	33	..	..	38
	Minimum	35	22	17	14	14	29	22	8	10	28	26	31	18	7	7	1	14	35	7	11	13	14	31	37	31	27	19	13	16	..	..	18
Southern Division.																																	
Beckley	Maximum	65	38	35	49	58	54	53	60	59	58	70	72	40	21	49	60	71	70	60	69	70	71	60	55	54	45	46	33	42	..	..	54
	Minimum	30	13	5	20	29	32	13	24	18	13	30	40	15	1	5	15	30	35	19	31	30	45	45	38	29	18	18	15	25	..	..	23
Bluefield	Maximum	57	35	24	38	44	48	49	51	49	51	60	60	59	21	36	47	60	54	36	49	56	62	54	54	39	39	28	29	30	..	..	46
	Minimum	35	23	13	12	25	33	28	15	39	29	30	42	24	4	4	20	35	36	11	25	25	31	45	37	28	22	18	14	24	..	..	29
Charleston	Maximum	44	40	38	36	50	58	52	48	49	52	64	63	58	55	54	55	59	62	50	62	58	64	60	60	59	58	53	55	55	..	..	54
	Minimum	38	25	20	9	10	28	35	19	16	33	29	30	22	5	8	8	18	34	15	15	31	30	31	41	32	29	23	19	19	..	..	22
Elkhorn	Maximum	55	38	28	36	44	48	48	55	54	51	60	63	62	24	37	45	58	58	41	58	58	65	63	51	42	32	30	32	32	..	..	47
	Minimum	38	28	16	13	25	34	37	19	41	32	31	40	21	6	12	20	30	37	11	29	41	37	44	42	31	25	18	17	16	..	..	27
Green Sulphur Spgs.	Maximum	62	35	27	37	45	49	44	41	42	49	62	63	55	20	37	47	59	48	34	59	57	69	52	51	41	32	33	33	37	..	..	45
	Minimum	32	23	11	5	16	17	12	11	32	29	22	30	18	3	5	12	23	31	8	24	33	24	36	35	28	24	16	16	23	..	..	24
Hinton§	Maximum	43	32	27	36	45	44	40	37	41	52	64	64	32	25	39	49	62	52	35	60	57	64	51	48	35	34	30	34	36	..	..	43
	Minimum	40	29	16	11	13	22	30	15	17	31	27	29	31	7	7	11	17	23	12	11	30	27	28	42	31	25	18	18	18	..	..	22
Holcomb§	Maximum	38	27	23	37	44	36	32	16	39	46	62	57	38	22	37	45	56	42	43	43	56	65	48	43	31	29	27	30	34	..	..	40
	Minimum	32	20	12	3	7	32	28	5	12	28	24	29	21	−3	0	8	15	31	6	9	14	21	32	40	28	22	12	14	6	..	..	17
Huntington§	Maximum	39	26	26	37	47	48	33	35	38	45	61	61	24	19	32	41	57	46	42	59	43	66	50	39	37	36	32	33	36	..	..	41
	Minimum	37	22	20	14	16	33	32	15	15	31	30	30	21	5	5	9	16	32	18	20	30	29	31	37	35	29	24	20	20	..	..	23
Lewisburg	Maximum	40	36	30	34	42	42	45	35	39	48	58	61	56	26	38	46	68	51	36	56	58	60	54	47	39	32	29	32	31	..	..	47
	Minimum	34	28	12	11	17	28	24	12	32	28	24	35	19	2	6	21	31	34	7	22	24	28	30	37	28	22	16	14	22	..	..	22
Madison§	Maximum	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Minimum	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Marlinton	Maximum	52	32	24	28	36	38	38	32	36	49	59	51	48	24	31	42	52	44	28	50	46	56	46	42	36	32	24	28	28	..	..	38
	Minimum	32	24	12	1	12	24	20	8	28	22	24	28	20	2	4	12	32	28	4	22	24	20	28	36	24	20	14	10	21	..	..	19
Point Pleasant	Maximum	55	35	28	35	47	46	43	34	37	45	63	56	47	21	34	45	58	50	36	61	47	66	60	47	39	35	33	31	38	..	..	45
	Minimum	31	19	17	10	19	28	21	8	29	24	26	37	18	4	−1	9	31	32	12	26	24	23	44	35	30	25	19	12	18	..	..	21
Powellton	Maximum	52	36	28	32	45	51	49	48	45	47	58	67	53	40	37	41	59	51	40	42	47	69	57	52	45	33	33	34	33	..	..	45
	Minimum	35	26	18	10	25	26	24	16	36	33	29	35	32	5	9	15	32	13	17	20	26	31	44	45	33	30	28	20	26	..	..	25
Robertsburg§	Maximum	38	25	27	35	18	47	33	31	35	37	62	57	21	19	38	45	56	45	47	60	44	66	47	41	37	34	30	30	37	..	..	44
	Minimum	35	21	17	1	7	28	32	9	12	24	25	28	19	3	2	2	12	29	12	14	24	24	27	37	31	27	20	11	14	..	..	18
Ryan	Maximum	54	33	29	33	40	45	45	31	36	46	59	55	55	24	34	44	48	44	32	58	53	70	50	48	38	32	30	29	32	..	..	42
	Minimum	33	29	17	1	27	28	24	10	32	30	25	30	19	5	0	8	29	32	2	27	27	24	34	38	32	28	6	7	19	..	..	21
Spencery	Maximum	40	29	29	34	47	45	35	44	65	64	64	59	25	25	35	50	58	46	49	61	64	70	52	48	50	50	34	30	36	..	..	45
	Minimum	36	22	17	0	17	27	31	10	31	24	34	44	19	5	0	9	29	32	−2	28	26	25	42	42	40	20	20	7	19	..	..	25
Union§	Maximum	60	32	25	33	48	45	33	43	45	51	61	62	35	28	40	60	55	35	38	58	55	65	60	40	35	30	30	32	..	..	..	41
	Minimum	31	28	13	14	15	24	23	13	17	20	25	35	25	4	5	10	26	24	9	10	18	24	32	31	28	23	12	15	16	..	..	19
White Sulphur Spgs.	Maximum	50	40	33	34	46	45	41	42	44	50	62	64	56	31	43	52	58	52	36	59	56	66	52	50	39	34	30	34	39	..	..	46
	Minimum	35	30	13	13	11	22	27	12	33	22	22	30	22	3	5	9	25	35	9	19	31	22	34	38	30	23	18	15	23	..	..	24
Williamson§	Maximum	41	27	29	36	43	45	37	51	42	53	66	61	33	25	39	49	64	55	34	64	56	69	54	45	37	35	33	34	32	..	..	44
	Minimum	40	26	20	11	13	29	34	20	20	35	33	33	26	10	10	15	20	31	20	20	32	32	34	45	36	30	23	20	20	..	..	27

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MARCH, 1916

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
APRIL 25, 1916

Departure of the Mean Temperature from the Normal, March, 1916.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIV. PARKERSBURG, W. VA., MARCH, 1916. No. 3.

GENERAL SUMMARY.

March averaged much cooler and wetter than usual, but the temperature fell to zero at only one station and the precipitation was well distributed over the State and throughout the month. The snowfall was also considerably above the normal. While the weather was generally unfavorable for farming operations, the conditions were excellent for fruit.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 29.98 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.44 inches on the 17th, and 29.05 inches on the 22d. Elkins, 30.41 inches on the 20th, and 29.03 inches on the 22d.

TEMPERATURE.

The monthly mean for the State, 48 stations reporting, was 38.5°. The mean departure from the normal for 43 stations having ten or more years of record was —4.2°. Abnormally cool weather prevailed from the 2d to the 6th, 8th to the 12th, and 15th to the 21st, with the lowest temperatures occurring on the 3d-4th, 8-9th, 11th, and 15-16th. The temperatures were above the normal on the 6-7th, 21st-22d, and 30th-31st, with the highest readings, ranging generally from 75° to 85°, on the 25-26th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 77 per cent; 8 p. m., 66 per cent. The March averages for the same hours for the past 26 years are 80 and 69 per cent, respectively. Elkins, 8 a. m., 82 per cent; 8 p. m., 71 per cent. The March averages for Elkins for the same hours for the past 16 years are 83 and 71 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 61 stations reporting, was 4.88 inches. The departure from the normal for 50 stations having ten or more years of record was + 1.01 inches. The precipitation was heaviest from the middle western counties eastward over the central counties, or over the Little Kanawha basin and northern tributaries of the Great Kanawha basin, where the monthly amounts ranged from about six inches to nearly ten inches. The amounts were lightest over the northern, southern, and southeastern counties. Moderate rain or snow, mostly snow in the mountain districts, fell on the 2d-4th, and moderately heavy rain on the 6-7th, followed by light rain or snow on the 8th, 9th, and 10th. Snow or rain also occurred on the 14-16th, and generally heavy rain on the 21st-22d and 27-29th.

RIVERS.

The heavy rain on the 21st-22d caused the rivers in the district to rise moderately. At the close of the month, owing to heavy rain in many sections of the valley on the 27-29th and melting snow in the Allegheny basin, the Ohio in the district was slightly above the flood stage from Parkersburg southward. The following stages were noted: Parkersburg, 37.1 feet on the 30th; Point Pleasant, 43.0 feet on the 31st.

WIND.

The average wind velocity at Parkersburg was 6.9 miles per hour, or 0.3 mile below the March average for the past 26 years. The average at Elkins was 5.5 miles per hour, or normal, as compared with the March average for 17 years. The highest velocity at Parkersburg was 45 miles per hour from the northwest on the 7th, and at Elkins 30 miles per hour from the northwest on the 22d.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 44 per cent of the possible amount, or 6 per cent above the March average for 18 years. The average at Elkins was 43 per cent, or 6 per cent above the March average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 30th and 31st; Bayard, 28th; Buckhannon, 14th; Charleston, 2d; Clay, 7th; Creston, 30th; Davis, 21st; Grafton, 12th, 13th, 14th, 25th, 26th, 30th, and 31st; Holcomb, 21st; Mannington, 30th and 31st; Pickens, 2d; Robertsburg, 30th; Smithfield, 14th, 21st, 22d, and 30th; Williamson, 31st.

Hail: Bayard, Bens Run, Buckhannon, Burlington, Creston, Glenville, Grafton, Holcomb, and Wheeling, 22d; Ryan, 27th, and Romney, 28th.

Halo, lunar: Parkersburg, 9th and 19th; Pickens, 12th.

Halo, solar: Piedmont, 1st; Wellsburg, 1st, 13th, 14th, and 25th.

Haze: Bayard, 24th.

High winds: Bayard, 22d; Buckhannon, 8th and 27th; Charleston, 7th; Creston, 7th; Evans, 8th; Glenville, 7th, 8th, and 27th; Lewisburg, 22d; Parkersburg, 7th and 22d; Pickens, 6th, 7th, and 8th; Smithfield, 8th; Terra Alta, 9th and 22d; Wheeling, 8th.

Thunderstorms (dates and number of stations reporting): 13th, 6; 14th, 9; 18th, 3; 21st, 5; 22d, 21; 23d, 1; 26th, 8; 27th, 10; 28th, 1.

COMPARATIVE DATA FOR MARCH.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	31.9	..	..	4.91	....	....	....	..	..	..
1892	36.4	87	8	3.50	....	....	....	..	..	..
1893	40.7	84	3	1.19	2.89	0.89	5.2	8	8	15
1894	45.8	88	1	1.94	3.05	0.74	1.9	15	9	7
1895	39.6	90	6	3.05	4.75	0.89	7.9	11	9	11
1896	36.1	76	10	4.45	8.40	1.76	..	10	8	13
1897	46.1	84	12	3.60	6.52	1.23	....	9	10	12
1898	38.5	86	9	5.43	10.05	1.25	T.	8	9	14
1899	42.5	76	0	7.82	8.18	2.40	4.5	7	9	15
1900	38.5	78	5	3.79	6.48	2.18	14.7	7	9	15
1901	42.9	83	14	3.23	5.27	0.90	2.3	8	8	15
1902	47.4	80	5	4.30	6.29	3.00	15.0	10	9	12
1903	41.3	87	13	4.47	6.59	2.76	0.2	10	9	12
1904	44.8	86	7	4.12	6.10	1.38	1.9	9	8	14
1905	46.6	88	2	4.10	6.46	1.45	0.7	14	7	10
1906	37.3	75	7	1.77	8.11	1.98	13.4	7	6	18
1907	40.6	94	2	4.77	8.18	1.05	4.2	12	8	11
1908	47.8	89	15	5.04	8.60	1.25	1.1	11	8	12
1909	40.8	83	10	3.38	8.66	1.10	1.7	9	10	12
1910	40.2	90	5	0.55	2.25	0.04	1.1	18	9	4
1911	40.5	90	5	3.30	7.86	1.12	5.2	11	8	12
1912	39.9	89	6	5.02	9.36	1.78	5.1	8	7	16
1913	45.7	89	3	4.55	7.90	1.77	2.7	11	9	11
1914	37.3*	85	13	3.03	7.41	0.89	17.7	10	8	13
1915	34.4	63	7	1.61	4.32	0.53	6.7	12	7	12
1916	38.5	88	4	4.88	9.88	2.49	9.0	11	7	13
Means and Extremes	42.2	94	13	3.85	10.05	0.04	5.7	10	8	13

Climatological Data for March, 1916.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	14	32.5	−5.3	72	25†	2	16	44	5.44	+1.07	1.44	12.2	16	7	6	18	w.	G. C. Dixon
Burlington	Mineral	875	22	35.9	−5.3	73	26	8	18	42	5.23	+2.08	1.78	7.0	8	6	17	8	nw.	J. W. Vandiver
Franklin	Pendleton	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	William McCoy
Harpers Ferry††	Jefferson	244	27	...	...	...	...	...	...	...	3.76	+0.67	1.65	4.0	9	.....	.....	.....	e.	S. W. Lightner
Lost City	Hardy	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. D. Hinegardner
Martinsburg	Berkeley	435	24	35.8	−5.2	72	26†	10	18†	37	5.07	+1.94	.....	1.0	8	15	5	11	e.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	.....	.....	.....	.....	.....	.....	.....	4.00	+1.39	1.20	1.9	9	.....	.....	.....	.....	M. S. Henkel
Piedmont	Mineral	919	0	36.0	.....	73	31	9	18	40	5.42	+2.50	1.88	7.5	13	10	6	15	nw.	C. A. Suter, Jr
Romney	Hampshire	824	19	37.0	−5.6	76	26	12	16	43	6.02	+3.10	2.00	5.0	11	6	11	14	.....	Geo. E. Arnold
Upper Tract	Pendleton	1,230	18	37.5	−5.7	79	25	10	17	48	2.83	+0.41	0.90	3.0	5	19	6	6	w.	J. M. Mallow
Averages and	Extremes	.....	.....	35.8	−5.4	79	25	2	16	48	4.86	+1.78	2.00	5.4	10	11	8	12	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	39.2	−3.9	83	25	12	16	43	5.58	+1.41	1.60	9.0	10	19	2	10	.....	J. D. Riggs
Brandonville	Preston	1,809	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	20	39.2	−2.2	86	25	10	16	46	6.78	+2.37	1.75	12.0	10	14	7	10	.....	H. A. Darnall
Cairo	Ritchie	674	14	...	...	...	...	12	16	....	6.78	+2.55	1.60	3.5	15	9	11	11	.....	Van A. Zevely
Central Station[c]	Doddridge	950	19	38.6	−3.2	84	.....	10	11†	45	4.97	+2.11	0.84	.....	14	4	6	16	.....	D. H. Doak
Cheat Bridge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.13	.....	1.00	9.5	14	.....	.....	.....	.....	.....
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	5.00	.....	1.50	.....	6	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	15	41.5	−2.3	85	25	14	16	46	6.71	+3.05	1.27	7.2	18	10	6	15	w.	J. M. Reed
Davis	Tucker	3,093	8	.....	.....	.....	.....	.....	.....	.....	5.50	.....	1.30	21.0	19	8	4	19	sw.	Ross C. Male
Elizabeth	Wirt	646	5	.....	.....	.....	.....	.....	.....	.....	6.25	.....	1.45	.....	17	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	16	36.8	−2.3	82	25	6	16	45	5.53	+1.46	1.28	13.4	20	3	9	19	w.	U. S. Weather Bureau
Fairmont	Marion	883	11	39.9	−4.9	86	26	9	16†	52	4.34	+0.38	1.02	5.0	17	18	0	13	w.	F. P. Hall
Glenville	Gilmer	738	23	42.8	−1.1	88	25	13	16	50	6.35	+2.28	0.96	8.5	16	14	7	10	w.	M. T. Brannon
Grafton	Taylor	1,000	24	40.0	−2.7	86	25	9	4	40	5.33	+1.31	1.20	8.4	15	12	5	14	w	Joseph Gerken
Lost Creek	Harrison	1,026	19	39.5	−3.2	85	26	10	16	47	4.15	+0.05	0.91	7.6	14	11	3	17	w.	Allen Smith
Mannington	Marion	974	14	38.0	−5.2	81	25†	9	16†	49	4.42	+0.67	1.11	6.6	17	7	10	14	w.	Jas. A. Morgan
Pantown	Monongalia	1,250	24	37.0[a]	−5.2	82[a]	26	11[a]	4	39[a]	3.90	+0.09	1.19	5.3	14	11	7	13	n.	Prof. Edgar L. Andrews
dsville	Marshall	642	14	38.6	−4.8	85	25	10	18	47	2.49	−1.06	1.33	4.0	6	15	5	11	sw.	M. Z. White
N Cumberland	Hancock	987	19	32.8	−7.3	80	25	−4	18	49	3.72	+0.33	1.10	14.8	11	7	13	9	nw.	M. F. Smith
New Martinsville	Wetzel	634	23	38.0	−5.6	78	26	12	16	57	4.08	+0.8.	1.32	.....	12	16	5	10	s.	Wm. Ankrom
Parkersburg	Wood	638	28	39.4	−2.9	82	25	13	16	39	4.48	+0.66	1.17	5.7	17	12	5	14	nw.	U. S. Weather Bureau
Parsons	Tucker	1,656	17	35.6	−6.8	82	26	3	12	49	4.09	−0.21	1.48	7.5	8	11	5	15	.....	J. W. Swisher
Philippi	Barbour	1,149	20	38.2	−4.5	84	26	10	16†	45	3.81	−0.39	1.40	5.5	11	13	6	12	w.	Okey [illegible] Robinson
Pickens	Randolph	2,697	14	36.6	−3.0	87	25	2	11	45	9.88	+4.49	1.80	50.0	17	12	6	13	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	30	.....	.....	.....	.....	.....	.....	.....	5.98	+1.79	1.24	19.0	16	.....	.....	.....	w.	F. R. Proudfoot
Saint Marys	Pleasants	577	8	.....	.....	.....	.....	.....	.....	.....	6.20	.....	1.20	6.3	16	.....	.....	.....	w.	J. O. Goodman
Smithfield	Wetzel	835	11	37.2	−4.9	85	25†	11	16	49	4.88	+0.77	1.05	5.0	17	14	6	11	nw.	G. M. Whisler
Terra Alta	Preston	2,612	16	32.0	−7.4	69	27†	3	18	41	6.20	+1.10	2.10	8.0	16	10	9	12	w.	C. F. Dodge
Wellsburg[d]	Brooke	1,225	16	35.4	−5.8	76	26	3	18	52	3.45	+0.11	1.10	10.0	9	8	9	10	w.	C. P. Waugh
Weston	Lewis	1,026	21	39.8	−3.9	82	26	10	16	46	5.22	+0.81	1.00	14.4	17	13	10	8	w.	Miss C. M. Davis
Wheeling	Ohio	645	30	36.4	.....	86	25	9	16	52	4.08	+1.03	1.05	8.9	17	12	6	13	n.	Miss M. B. Forsyth
Averages and	Extremes	.....	...	37.7	−4.2	88	25	−4	18	52	5.16	+1.12	2.10	10.6	14	11	7	13	w.	
Southern Division.																				
Bancroft	Putnam	574	12	40.4	−4.1	84	25	8	4	5	4.81	+1.01	0.92	6.0	14	11	4	16	ne.	R. E. Dent
Beckley	Raleigh	2,440	16	45.3	.....	78	25†	9	1	52	5.04	1.52	1.65	10.0	10	12	4	15	w.	John A. Ewart
Bluefield	Mercer	2,558	21	42.0	−1.7	78	25	10	4	55	5.06	0.6.	1.70	9.0	4	15	7	9	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	13	45.8	−3.1	75	26†	14	4†	46	4.66	+0.50	0.80	5.5	14	12	4	18	w.	C. V. Lewis
Clay	Clay	706	0	.....	.....	.....	.....	.....	.....	.....	4.52	.....	1.02	9.0	11	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba ††	Jackson	659	14	40.8	−3.4	84	26	9	16	50	5.45	1.98	1.60	6.0	10	7	15	9	nw.	C. T. Perry
Dam 22 O. R.	Jackson	638	...	...	...	...	...	...	...	...	5.27	.....	1.20	5.0	14	.....	.....	.....	w.	U. S. Engineer Office
Dam 26 O. R.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.34	.....	0.90	8.0	16	.....	.....	.....	.....	.....
Dunlow	Wayne	703	8	...	...	...	...	...	...	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	James W. Damron
Elkhorn	McDowell	1,933	23	43.4	−2.5	78	24†	11	4	58	2.84	1.52	0.90	9.0	12	6	14	11	w.	J. L. Lincoln
Evans	Jackson	666	0	.....	.....	.....	.....	.....	.....	.....	5.78	.....	1.60	6.0	14	13	1	17	.....	B. F. Sayre
Green Sulphur Spgs	Summers	1,600	20	38.7	−4.4	82	31	10	4	56	4.75	+1.09	1.40	14.0	12	12	6	13	n.	W. H. Gwinn
Hinton	do	1,450	19	39.4	−5.0	80	25	11	1	48	3.27	0.85	0.80	2.5	13	10	5	16	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	35.4	.....	81	25	7	16	51	6.15	.....	.....	30.0	19	7	5	19	.....	R. E. Ferguson
Huntington	Cabell	558	20	40.7	−4.0	84	25	13	4	45	3.20	0.96	1.15	7.0	11	17	0	14	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	16	38.2	−4.3	78	25	9	4	40	2.71	−1.31	0.70	7.0	9	3	13	15	sw.	Geo. T. Argabrite
Logan	Logan	687	13	...	...	...	...	...	...	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Oliver, Jr
Madison	Boone	704	10	...	...	...	...	...	...	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	15	35.4	5.7	70	25	8[b]	1[b]	40	4.88	1.66	1.15	7.0	14	3	25	3	sw.	S. L. Brown
Nuttallburg	Fayette	2,252	23	...	...	...	...	...	...	...	3.09	−0.76	1.20	14.0	6	12[b]	8	2	.....	Miss Donna Tully
Point Pleasant	Mason	553	23	41.4	−3.9	85	26	9	4	46	0.80	1.97	1.00	6.0	18	12	1	15	nw.	W. D. Holmes
Powellton	Fayette	933	20	44.8	−1.9	83	25	5	1[b]	44	2.50	0.80	1.72	.....	9	14	11	6	.....	S. C. Lampert
Robertsburg	Putnam	571	16	39.0	−6.1	86	25	5	4	49	0.66	1.12	0.52	7.5	18	9	5	17	...	E. C. Brace, Jr
Ryan	Roane	700	13	39.3	5.0	80	25	10	4	42	6.04	+2.02	1.32	7.5	15	9	8	14	.....	Wm. E. Ryan
Spencer	do	784	12	40.1	−2.1	85	25	11	5	52	5.74	+3.24	1.90	10.1	13	3	17	11	.....	A. M. McKown
Sutton	Braxton	839	10	...	...	...	...	...	...	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ben Gillespie
Union	Monroe	2,250	12	38.2[a]	−5.0	82[a]	25	5	1	43[a]	2.55	−1.02	0.90	4.0	5	.....	.....	.....	.....	J. C. Shanklin
White Sulphur Springs	Greenbrier	1,940	6	35.5	.....	78	25	10	16	48	2.61	.....	0.72	9.0	10	16	4	11	sw.	J. M. Ayres
Williamson	Mingo	660	16	44.8	−2.4	85	24	12	4	54	3.28	−1.09	0.92	2.5	14	16	3	12	w.	J. F. Keyser
Averages and	Extremes	.....	...	40.5	−3.8	86	25	5	4†	58	4.53	−0.55	1.91	8.3	12	11	7	13	w.	
State Averages and	Extremes	.....	.....	38.5	−4.3	88	25	−4	18	58	4.88	−1.01	2.10	9.0	13	11	7	13	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for March, 1916.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
ayard	Potomac		.05	.12		T.	.04	.94	.19	T.	.15	T.		.05	.72	.30	.02		T.	.05		.24	1.44	T				.72	.25	.16			5.44
urlington	do		T	.30			T.		T						*	1.05		T.	T.			.10	1.70				.30	*	1.78				5.23
ranklin	do																																
arpers Ferry	do		.10		T.					T.					.10	.40	.10	T.				.72	.31				.18	1.65	.20	T.		3.76
ost City	do																																
artinsburg	do	.10		T.			T.	.10	T.						*	.83		T.				1.47					*	*	2.57			5.07
oorefield	do		.06	.18											45	.26				.01		1.20					.77	.93	.14			4.00
iedmont	do		.21	.05			.05	.06	.02						.81	.20			.04			.16	1.88					.70	1.09	.15			5.42
omney	do		.10	.20			.10		.07						.63	.30						.10	2.00					1.15	1.00	.35			6.02
pper Tract				.35						T.					.40								.90					.70	.48	T.			2.83
Northern Division.																																	
ens Run	Ohio		.30	.05			.25				.20				.65	.62						.30	.91					1.60	.70				5.58
andonville	Monongahela																																
uckhannon	do		.70	.70	T.		T.	.83	.05		.05				1.35	.40							1.75				T.		.70	.25			6.78
airo	Little Kanawha		.22	.10			.20	.44	.08		.24			.07	.24	.25			.90			.45	.60					1.27	1.60	.12			6.78
entral Station	Middle Is. Creek			.08	T.		.18	.38	.10	T	.05			.01	.65		.64					.32	.51				.08	.77	.84	.06			4.97
hear Bridge			.02	.35	.05	.18			.67		.15				.40	.54		.22		.05		.07		.25					1.00	.20			4.13
ortland	Monongahela				.30				.90							1.50							1.00	.70				.60					5.00
reston	Little Kanawha	T.	.32	.20	.20		.18	.51	.10	.20	.04	.05			.11	1.00	.03					.32	.80	.14				.90	1.27	.34			6.71
avis	Monongahela	.05	.15	.15	.35	T.	T.	.25	.15	.25	.10	.20			.37	.68	.20	.20	T.			.12	1.30	.20			.04	.57	.17		T.		5.50
lizabeth	Little Kanawha		.30	.06	.03		.14	.50	.05	.04	.20	.02			19	1.12	.01					.34	.70					.80	1.45	.30			6.25
lkins	Monongahela	.06	.36	.66	.01		T	.51	.18	.03	.19	T	T	.21	.56	.09	.03	.01			T	.20	1.28	.02	T.		.05	.46	.54	.08			5.53
airmont	do		.13	.08	.04	T.	.01	.38	T.	.03	.07	.05		T.	.30	1.02	.02	T.				.28	1.02	.14			.10	.04	.33	.30	T.		4.34
lenville	Little Kanawha		.28	.20	.96		.06	.50	.12	.08	T.				.24	.86						.54	.75	.16				.56	.62	.34	.08		6.35
rafton	Monongahela		.20	.20	.40		.10	.65	.04					.66	.50	.65						.30	1.20				.09	.20	.43	.28			5.33
ost Creek	do		T.	.31	.03		.03	.54	.06	.05	.14			T.	.60	.40	T.	T.				.30	.91				T.	.20	.41	.12			4.15
annington	do		.39	.06	.04		.13	.44	.09	.02	.20				.46	.64	.01	T.				31	1.11				.05	.05	.30	.11			4.42
organtown	do		.05	.06	.02				.23		.08				.40	.71		T.				.24	1.19				.23	.16	.28	.23	.02		3.90
oundsville	Ohio		.10						T.		.10				.30	.30						1.	1.33					.31					2.49
ew Cumberland	do		.25	T.	.02		.25	.65	.10		.05				T.	.55					T.	.55	1.10				T.	T.	.38	.02			3.72
ew Martinsville	do		.05				.15	.32		.10	.20				.62	.65						.22	1.32					.45	.45	.05			4.58
arkersburg ***	Ohio		.28	.02	T.	.03		.20	.35	.03	.01	.11		T	.10	.52	.27				.13	.05	.56			.02	T.	1.13	.64	T.			4.48
arsons	Monongahela			.05	.20			T.	.25		.10				1.21	.20					1.48		1.					T.	.60				4.09
hil pot	do			.15	.40				.10		.05				.70	.50							1.40				.05	.06	.40	.20			3.81
ickens	do		.10	.80	1.00			.81	.50	1.00	.50				1.80	.60	.20	.10				.28	.99				.28	.16	.59	.12			9.88
owlesburg	do		.30	.14	.18	T.		.08	.22	.08	T.	.26			.50	.80	.18	T.				.32	1.24	.54					.48	.16	.08			5.98
int Marys	Ohio			.25	.06			.20	.54	.40	.04	.12	.05		.20	.93	T.					.24	.90	.10				1.05	1.20	.10	T			6.20
mithfield	Fishing Creek				.10	.10		.11	.50	.66	T.	.25	T		.07	.38	.70	.10				.35	1.05	.05			T.	.50	.32	.11	.09			4.88
erra Alta	Monongahela		T.		.05	.04		.15	.08	1.10	.21				.11	.78	.15	.02	.05	.02		.20	2.10				.34	.54					6.25
ellsburg	Ohio		.30						1.10	.10						.40						.20	1.10		T		T.	.08	.10	.07			3.45
ston	Monongahela		.30	.40	.30		T.	.50	.06	.20	.04	T.		.06	.26	.50	.50	.04				.20	1.00					.06	.50	.56			5.22
heeling	Ohio		.27		.01		.05	.45	.03	.05	.12	.01			1	.80	.0.	.01				.13	1.55	.03	T.	T.		.02	.34	.15			4.08
Southern Division.																																	
ancroft	Great Kanawha		.33	.10	.30		.28	.48	.05			.24				.47						.29	.17	.29				.92	.71	.18			4.81
ckley	do	.20	.95	.20	.10		.68			.10				.26	*	*		.98		.90		*		1.00				*	*	1.53			6.15
ineield	do							1.79	.10							.40						1.15						.60	.70				5.04
arleston	do		.30	.25	.20		T.	.46	T.	.12	T	.40			.08	.65						.34	.12					.80	.60	.30	.04		4.66
lay	do		.45	.22	.40			.15	T.		.30					1.	.50					.18	.20					1.02	.90	.20			4.35
uba	Sand Creek		.27	.20	.10		.33	.32	T.	T.	T				1.60	.30					T.	1.30			T.	T.	.56	.77	T.			5.45
am 22 O. R.	Ohio		.25	.10	T.		.15	.40		.04	.09	.16			.07	1.20	T.					.29	.70					.64	.87	.30			5.27
am 26 O. R.	do		.24	.10	.10		.10	.42	.02			.29			.07	.75	.20	T.				.18	.60	.02				.95	.85	.42			5.34
unlow	Big Sandy																																
khorn	do		.45	.30	.10		.15	.20	.15					.21		.90		.02		.50								.23	.19				2.84
vans	Ohio	T.	.20	.17		.12		.50	.04	T.	.24	T.			.76	.90	T.					.30	.95	.02				.74	1.05	.02			5.78
reen Sulphur Spgs.	Great Kanawha		.30	.10	.30			1.00	.30							.25	.20	.30					.40	.14					.80	.65	T			4.76
inton	do		.36	.28	.18			.42	T.	.06		T.			T.		.10	.03		T.		.28	.14	.10				.46	.80		.06		3.27
olcomb	do	*	*	*	.89			.97	*	.12	.10			.26	*	*		.98		.90		*		1.00				*	*	1.53			6.15
untington	Ohio		.50	.14	.20		.08	.44		.04					.24	.82	T.					.18	.06	.02				1.18	.78	.72			5.20
ewisburg	Great Kanawha		.20	.50				.70	T.		T.			.06		1.			.11			.55	.18					.21	.32	T.			2.71
ogan	Guyandotte																																
adison	Great Kanawha																																
arlinton	do		.30	.20	T.			1.15	.10		.04				.38	.05	T		.22		T.	.38	.60					.20	.56	.08	.62		4.88
attaliburg	do			1.20			.60		.20		T.				.20								.20					.60					3.00
int Pleasant	Ohio		.30	.18	.12		.04	.57	.02	.04	.04	.10			.08	1.28	.02					.40	.55	.04				.90	1.32	.35			6.60
owellton	Great Kanawha			1.72				.70		.03					.10							.10	.25	.05				1.35	.75				5.35
obertsburg	do		.34	.10	.30		.05	.45	.05	.00	.02	.02			.10	.92	.10					.40	.55	.02				.92	.65	.33			5.06
yan	do		.43	.32	.02		.05	.53	.14		.19				.18	.80						.05	.75				T.	1.10	1.52	.03			6.04
pencer	Little Kanawha		.30	.10	.55	.20	.50		T	T	.20				.17	.55	.03						1.91					.63	1.50	.30			6.74
tton	Great Kanawha																																
nion	do	T.	T.	.40				.90	T.													.20	.40					.65	T.				2.55
hite sulphur Spgs.	do			.72				.42	T.						.08	.10						.10	.19					.04	.23	.54	.03			2.61
illiamson	Big Sandy		.32	.14	.09			.54		1.		.08			.04	.25	T.					.20	.01	.08				.01	.92	.20	.40			3.28

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‡ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for March, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Division.																																	
Bayard	Maximum	34	35	33	16	32	42	55	47	23	36	26	37	56	56	54	14	18	32	35	36	39	64	43	62	72	72	65	45	37	55	67	43.2
	Minimum	16	27	13	4	15	20	30	17	8	19	6	12	36	34	10	2	9	3	18	9	28	38	19	23	36	58	38	33	30	35	36	21.8
Burlington	Maximum	42	41	37	29	41	38	56	47	34	18	37	46	63	52	42	27	29	30	40	42	48	52	45	55	71	73	60	43	44	63	69	46.6
	Minimum	22	31	19	14	19	24	27	24	19	22	15	15	34	42	17	13	18	8	19	16	32	34	28	23	29	37	40	38	35	35	31	25.2
Martinsburg§	Maximum	44	39	26	40	40	30	59	43	38	48	41	55	63	47	34	29	30	32	42	38	45	45	46	54	68	72	46	44	46	66	72	45.9
	Minimum	23	25	24	17	17	27	23	28	20	24	19	21	26	38	32	19	14	10	10	19	22	30	27	28	32	36	41	40	36	37	36	25.8
Piedmont	Maximum	42	40	34	36	39	35	56	41	32	39	38	43	60	54	36	40	27	28	37	39	45	50	44	55	72	72	63	42	44	64	73	45.8
	Minimum	20	31	21	11	30	22	29	26	15	26	15	18	36	36	18	25	15	9	22	17	29	34	25	26	36	40	38	38	35	36	33	26.2
Romney	Maximum	45	43	41	30	44	40	58	59	35	46	40	41	66	59	44	28	30	30	43	43	44	53	52	57	62	76	73	48	44	64	73	48.7
	Minimum	24	30	26	13	17	24	25	26	18	22	15	16	24	37	24	12	20	18	20	15	27	35	26	23	30	41	40	40	33	36	30	25.2
Upper Tract	Maximum	41	44	40	29	42	41	58	57	34	46	38	65	65	63	41	27	35	29	40	45	49	69	52	63	79	78	67	43	41	66	69	50.0
	Minimum	16	30	2	11	25	25	29	23	17	29	16	17	30	39	22	11	10	19	21	16	20	35	26	25	32	39	37	37	34	35	30	25.0
Northern Division.																																	
Bens Run	Maximum	42	38	32	28	41	56	62	44	37	43	39	49	64	53	36	28	29	37	39	43	55	66	45	70	83	79	65	52	53	69	72	50.0
	Minimum	21	31	21	14	26	29	41	24	17	27	17	23	44	36	18	12	16	14	26	19	25	34	25	30	40	47	49	41	40	46	37	28.5
Buckhannon	Maximum	45	38	34	24	40	58	60	38	30	39	34	44	62	67	52	25	28	40	40	44	55	70	48	68	86	82	69	53	45	60	68	49.8
	Minimum	20	34	20	13	29	30	35	20	16	25	17	20	40	47	19	10	19	13	26	19	40	40	27	27	40	49	51	42	38	34	52	28.5
Creston	Maximum	43	42	37	30	16	62	64	56	37	43	41	51	67	61	49	31	35	42	44	48	56	71	48	73	85	79	73	55	53	67	75	52.7
	Minimum	20	33	22	15	24	32	42	27	17	30	15	19	36	42	22	14	21	16	26	17	39	44	28	27	39	46	51	38	39	34	34	29.3
Elkins	Maximum	44	39	28	31	38	51	59	35	34	39	32	48	62	66	40	22	25	42	36	46	48	69	42	70	82	79	63	45	41	60	70	48.0
	Minimum	18	28	15	11	28	27	35	17	14	22	12	15	48	40	11	6	15	10	24	15	33	26	25	26	37	47	44	38	35	35	32	25.3
Fairmont§	Maximum	44	36	25	31	42	57	59	32	40	35	41	49	60	63	26	31	31	36	40	42	51	70	49	71	82	86	62	47	48	63	74	49.
	Minimum	19	21	20	15	14	27	35	27	17	18	14	16	29	37	21	9	9	9	13	16	20	34	25	26	31	41	52	43	37	35	32	24.1
Glenville	Maximum	48	44	37	33	47	67	64	61	38	46	45	54	69	68	56	30	35	42	45	50	56	72	52	76	88	86	74	67	54	68	78	56.3
	Minimum	20	35	21	15	22	31	44	25	17	30	16	19	37	43	22	13	22	15	28	16	39	43	28	26	38	41	52	39	38	35	33	29.1
Grafton	Maximum	46	45	35	28	42	57	55	58	33	36	40	43	64	58	40	28	31	38	47	44	46	73	51	74	86	85	70	54	50	65	74	52.1
	Minimum	20	33	24	9	21	24	44	25	17	24	14	20	38	43	20	16	18	12	16	17	34	42	26	28	40	47	54	43	38	31	34	28.0
Lost Creek	Maximum	41	40	34	26	43	59	60	55	34	42	39	47	64	67	53	27	31	37	41	43	49	67	50	70	84	85	70	56	46	63	74	51.5
	Minimum	15	33	20	13	31	29	42	25	17	28	14	17	39	39	19	10	19	12	23	15	37	41	26	24	37	45	53	40	38	31	39	27.5
Mannington	Maximum	40	41	32	28	40	56	60	52	32	41	36	44	58	63	42	25	28	37	37	39	47	71	43	67	81	81	67	53	48	63	71	14.2
	Minimum	15	33	19	14	24	26	41	26	18	29	13	19	33	38	18	9	15	9	21	15	33	36	25	26	35	42	53	43	39	32	31	26.8
Morgantown	Maximum	39	38	31	24	34	55	60	47	39	38	34	44	.	61	38	23	24	11	36	40	44	65	42	67	80	82	66	49	47	61	70	46.
	Minimum	19	31	16	11	20	25	41	22	25	21	12	22	.	36	17	12	12	19	24	14	31	35	18	28	50	58	46	42	36	37	36	27.2
New Cumberland	Maximum	36	34	28	27	52	44	52	48	32	39	37	44	54	43	40	28	25	26	35	35	44	40	39	57	80	68	69	56	58	66	74	44.5
	Minimum	9	23	9	6	18	18	34	20	11	22	8	18	36	29	12	2	2	4	18	5	29	25	18	20	31	41	48	40	36	32	30	26.7
New Martinsville	Maximum	40	46	32	36	40	52	60	50	36	34	35	47	52	48	38	30	36	38	36	42	47	55	47	58	75	78	67	55	56	68	70	17.8
	Minimum	26	31	19	14	26	29	40	22	18	29	16	23	38	35	26	12	15	14	25	18	34	37	25	29	38	45	53	42	41	36	36	28.3
Parkersburg	Maximum	41	39	26	31	42	64	62	35	38	42	37	51	66	50	53	27	26	32	36	41	54	69	44	72	82	78	68	51	52	64	72	49.4
	Minimum	25	26	20	13	31	33	35	22	19	25	20	24	44	33	15	12	17	16	26	21	37	38	26	33	47	51	51	40	40	39	41	29.6
Parsons	Maximum	42	38	32	23	37	50	53	41	29	39	32	41	66	65	51	24	25	36	37	35	46	43	69	81	82	68	45	43	40	62	71	47.8
	Minimum	16	25	16	11	13	23	35	21	15	24	9	8	24	42	14	9	16	7	25	10	32	25	24	32	41	43	40	35	36	34	30	23.7
Philippi	Maximum	43	43	35	25	40	57	62	60	32	39	34	42	62	60	55	30	25	39	37	40	45	68	49	70	69	84	70	54	46	62	72	50.2
	Minimum	19	32	18	12	20	29	42	23	16	27	12	20	23	43	17	10	12	10	20	16	15	35	25	27	50	53	35	41	25	35	35	26.2
Pickens	Maximum	52	26	31	27	43	56	62	43	33	34	41	39	63	61	48	32	23	42	43	44	47	65	47	67	87	75	65	51	36	57	77	49.0
	Minimum	11	31	12	7	22	26	38	13	13	26	2	11	38	34	10	4	9	21	21	14	32	29	26	27	44	52	49	35	32	34	32	24.1
Terra Alta	Maximum	30	30	28	22	31	38	46	50	35	45	46	44	48	58	42	24	26	30	36	34	45	50	35	62	54	61	65	60	51	55	65	43.3
	Minimum	18	18	11	5	12	18	18	21	9	8	6	28	32	38	17	5	9	3	8	12	15	30	26	21	38	38	30	28	38	30	38	20.3
Wellsburg	Maximum	55	32	23	.	.	.	28	51	46	32	44	59	40	31	22	21	31	28	36	41	40	56	58	74	76	62	48	53	67	67	42.1
	Minimum	17	23	11	.	.	.	16	29	19	16	22	38	31	11	5	7	3	20	18	21	27	19	29	45	53	48	42	37	36	37	24.5
Weston§	Maximum	42	36	26	38	56	66	52	38	42	38	40	46	64	60	40	26	36	38	4	48	66	64	70	72	74	82	70	68	58	56	64	51.4
	Minimum	18	26	26	14	22	30	34	32	14	22	18	24	32	40	32	16	14	13	26	22	26	40	18	30	38	36	32	34	26	32	31	27.7
Wheeling§	Maximum	41	35	26	35	41	51	62	34	40	34	41	48	53	46	30	31	35	36	42	42	46	39	49	69	86	78	68	48	57	72	76	48.8
	Minimum	19	29	18	12	15	25	30	27	17	20	15	20	30	38	19	9	11	9	17	15	25	34	25	24	31	43	53	45	40	38	36	24.8
Southern Division.																																	
Beckley	Maximum	42	55	45	45	55	73	48	49	56	52	55	62	75	74	40	35	64	70	70	74	70	68	70	76	78	78	71	70	68	68	70	62.3
	Minimum	9	32	20	10	26	43	31	15	19	28	15	40	49	46	12	11	28	18	28	31	41	38	32	24	36	40	39	38	34	32	24	28.4
Bluefield	Maximum	37	42	37	70	14	63	56	53	59	69	40	42	62	65	50	56	55	58	57	57	64	68	60	78	78	75	65	51	37	57	67	55.0
	Minimum	16	31	20	10	26	27	40	20	14	30	19	20	36	50	17	10	18	24	22	21	38	41	25	34	50	55	46	34	32	26	35	29.1
Charleston	Maximum	55	54	53	51	51	70	68	65	55	59	61	60	68	70	68	56	55	65	58	60	63	71	68	72	75	77	72	62	59	69	74	63.7
	Minimum	24	25	27	14	14	37	36	29	20	20	24	33	38	40	23	17	18	22	23	28	23	32	28	29	32	37	36	40	38	35	36	28.1
Elkhorn	Maximum	39	43	40	31	49	69	68	58	55	44	38	51	67	65	27	38	57	58	55	65	63	55	74	78	78	78	59	47	41	57	68	54.8
	Minimum	17	35	16	11	31	37	45	29	19	34	23	23	38	24	14	23	25	31	24	42	35	24	36	50	50	47	36	29	26	35	36	31.0
Green Sulphur Spgs.	Maximum	41	42	39	36	50	58	60	48	37	41	39	47	65	67	58	28	31	52	48	51	58	72	55	74	74	76	56	44	46	64	82	52.2
	Minimum	11	30	26	10	19	31	36	26	16	23	15	23	15	39	19	10	18	11	22	10	35	47	28	25	31	29	42	41	34	31	29	24.8
Hinton§	Maximum	42	42	34	30	52	58	61	34	30	46	45	56	67	69	31	33	40	53	41	55	60	72	50	72	86	72	69	43	43	67	71	52.7
	Minimum	12	12	32	11	12	34	38	28	17	18	21	18	19	51	31	14	11	20	25	20	29	35	27	27	34	45	48	40	37	34	34	26.0
Holcomb§	Maximum	45	37	26	29	44	56	55	30	37	36	56	55	60	64	23	26	43	46	38	48	61	59	47	72	80	81	68	46	46	61	71	49.0
	Minimum	12	11	18	9	9	15	36	20	12	14	1	2	9	23	23	7	9	12	15	18	2	38	24	27	37	45	49	35	33	33	30	21.8
Huntington§	Maximum	46	38	28	41	49	67	59	33	46	42	58	55	65	57	27	33	35	45	45	50	68	72	47	72	84	77	68	42	51	65	74	51.9
	Minimum	25	28	27	17	11	35	42	29	21	21	22	24	30	45	22	16	18	23	24	24	27	32	25	28	38	52	49	40	39	36	39	29.5
Lewisburg	Maximum	39	42	36	29	45	62	67	54	34	44	36	54	66	63	56	26	33	40	42	48	56	71	48	66	78	71	64	50	42	59	70	50.7
	Minimum	6	31	17	9	17	3	35	29	14	25	16	17	32	40	18	9	18	10	29	15	32	42	25	27	38	45	49	38	34	31	31	25.8
Madison§	Maximum	..																															
	Minimum																																
Marlinton	Maximum	34	38	32	24	40	42	50	46	28	32	30	42	60	58	26	24	26	36	35	38	50	64	40	60	70	69	52	46	40	54	62	46.3
	Minimum	8	28	14	10	22	30	34	12	12	12	11	12	18	35	28	8	14	11	22	14	36	38	22	22	38	38	40	32	32	32	38	23.4
Point Pleasant	Maximum	44	42	37	32	48	66	69	56	48	47	42	50	65	64	46	29	36	42	46	48	60	72	49	75	85	77	73	55	52	68	74	54.4
	Minimum	20	30	18	9	24	35	37	24	18	28	16	20	41	46	26	11	16	23	18	36	36	25	29	43	48	48	38	36	33	36	38	28.3
Powellton	Maximum	38	44	39	37	48	70	66	56	35	45	39	48	66	70	57	39	37	58	56	56	60	72	59	75	85	77	70	57	44	58	75	55.9
	Minimum	18	35	24	15	36	38	47	25	7	30	20	24	34	50	23	15	25	20	30	22	38	48	36	31	46	49	49	41	38	40	35	31.6
Robertsburg§	Maximum	47	36	25	45	48	67	55	53	45	42	40	55	65	65	27	31	35	44	45	50	68	70	56	75	80	78	68	40	49	65	73	52.1
	Minimum	26	22	22	5	14	35	44	27	18	28	16	19	28	37	24	13	14	19	22	18	24	39	26	30	37	40	47	37	37	31	33	25.3
Ryan	Maximum	44	42	31	27	45	59	68	37	35	52	39	46	59	55	31	33	47	44	49	58	72	46	57	80	70	70	50	48	63	72	51.2
	Minimum	29	31	18	10	26	32	43	24	19	29	15	17	36	39	20	14	20	17	23	16	29	39	25	23	38	39	50	37	37	31	30	27.4
Spencer§	Maximum	46	38	24	27	52	68	62	56	4	32	55	55	68	69	36	30	35	44	44	65	75	65	45	78	85	81	67	40	60	70	75	53.4
	Minimum	17	20	21	14	11	31	43	28	18	19	15	18	28	36	22	11	19	15	20	15	14	43	23	26	36	42	56	39	38	30	38	26.7
Union§	Maximum	48	40	22	45	55	58	54	32	18	48	52	53	55	46	31	29	38	54	55	63	70	70	56	72	80	82	80	45	49	62	..	52.
	Minimum	6	16	20	10	11	29	27	21	14	15	17	15	25	39	22	10	13	17	18	20	31	28	26	31	41	43	45	39	35	31	31	21.
White Sulphur Spgs.	Maximum	45	19	41	31	49	58	62	54	39	44	42	55	69	69	61	30	32	48	46	49	58	73	54	72	73	72	64	56	45	62	73	53.3
	Minimum	15	32	20	11	12	32	32	24	15	25	15	12	35	39	22	10	20	15	28	14	34	43	26	24	36	42	50	40	33	30	28	26.
Williamson§	Maximum	48	45	32	45	56	72	65	35	47	45	60	65	68	50	35	42	67	50	57	73	77	73	80	85	80	69	51	48	65	68	75	58.
	Minimum	22	22	32	12	13	40	49	32	23	23	23	25	25	37	26	19	19	28	30	27	27	46	31	31	41	50	50	40	38	38	39	30.

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

APRIL, 1916

BY
HENRY C. HOWE
SECTION DIRECTOR

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MAY 25, 1916

Departure of the Mean Temperature from the Normal, April, 1916.



Shaded portions show excess (+). Unshaded portions show deficiency (−). Lines show amount of excess or deficiency.

S

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Section Director.

VOL. XXIV. PARKERSBURG, W. VA., APRIL, 1916. No. 4.

GENERAL SUMMARY.

April averaged somewhat cooler and drier than usual, with the precipitation exceptionally well distributed over the State and throughout the month. The snowfall was considerably above the normal. Owing to the cool, cloudy and showery weather, especially during the last decade, when heavy to killing frosts occurred in many of the more elevated sections, farm work and vegetation were about ten days late at the close of the month. Frost caused considerable damage to early peaches, pears, and plums. Winter wheat and rye were in good condition.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins were 29.99 and 30.00 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.28 inches on the 12th, and 29.63 inches on the 8th. Elkins, 30.29 inches on the 11th, and 29.62 inches on the 8th.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 50.5°. The mean departure from the normal for 41 stations having ten or more years of record was —1.1°. The month opened warm and the temperature was considerably above the normal on the 12-14th, 16-17th, and 19th-21st, with the highest readings occurring generally on the 20th. Considerably warmer weather also set in on the 30th. Cool weather prevailed on the 6-10th and 22d-28th, with the lowest readings occurring generally on the 7th and 10th, although freezing temperatures and heavy to killing frosts occurred in many of the more elevated sections from the 26th to the 28th, inclusive. Owing to the lateness of the season, however, the damage was confined mostly to early peaches, pears, and plums.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 74 per cent; 8 p. m., 61 per cent. The April averages for the same hours for the past 27 years are 75 and 62 per cent, respectively. Elkins, 8 a. m., 75 per cent; 8 p. m., 65 per cent. The April averages for Elkins for the same hours for the past 16 years are 80 and 64 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 59 stations reporting, was 3.07 inches. The departure from the normal for 46 stations having ten or more years of record was — 0.42 inch. The precipitation was heaviest over the eastern panhandle counties, where the amounts were somewhat above the normal. Except in scattered localities, deficiencies were noted elsewhere. Light showers were quite general on the 3d, 4th, and 5th. Moderately heavy rain or snow was received on the 8-9th, the snowfall on those dates in the southeastern, mountain, and eastern panhandle counties ranging generally from 6 to 14 inches; but the falls were generally light over the western and central counties. Showers were also quite general on the 14th and 17th, and daily from the 21st to the 28th.

WIND.

The average wind velocity at Parkersburg was 6.3 miles per hour, or 0.4 mile below the April average for the past 26 years. The average at Elkins was 5.0 miles per hour, or normal, as compared with the April average for 17 years. The highest velocity at Parkersburg was 39 miles per hour from the northwest on the 14th, and at Elkins 29 miles per hour from the northwest on the 14th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 38 per cent of the possible amount, or 11 per cent below the April average for 18 years. The average at Elkins was 35 per cent, or 10 per cent below the April average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 9th, 12th, and 29th; Bayard, 4th, 23d, and 25th; Burlington, 29th; Creston, 29th; Dam No. 26, 26th, 27th, and 28th; Elkins, 26th, 27th, 29th, and 30th; Glenville, 29th; Grafton, 1st, 5th, 6th, 7th, 24th, 26th, 27th, 28th, and 30th; Holcomb, 28th; Hinton, 29th; Mannington, 5th, 27th, 29th, and 30th: Marlinton, 28th, 29th, and 30th; Martinsburg, 5th; New Cumberland, 5th, 12th, 13th, 19th, 26th, 29th, and 30th; Pickens, 4th, 24th, 25th, and 28th; Robertsburg, 28th; Romney, 5th, 28th, 29th, and 30th; Rowlesburg, 6th, 26th, and 29th.

Frosts, light (after April 15): Charleston, 24th and 25th.

Frosts, heavy (after April 15): Elkins, 26th; Green Sulphur Springs, 25th and 26; Lewisburg, 30th.

Frost, killing (after April 15): Creston, 18th; Buckhannon, Lost Creek, and Pickens, 26th; Holcomb and Green Sulphur Springs, 26th and 29th; Terra Alta, 27th; Lewisburg, 29th.

Hail: Marlinton and Upper Tract, 21st; Mannington, 28th.

Halos, lunar: Bayard, 16th; Elkins, Parkersburg, and Pickens, 15th; Ryan, 14th.

Halos, solar: Elkins, 7th and 16th; Ryan, 13th and 18th; Wellsburg, 7th and 20th.

Sleet: Bayard, 3d.

Thunderstorms (dates and number of stations reporting): 3d, 1; 11th, 2; 12th, 2; 13th, 2; 14th, 1; 16th, 2; 17th, 3; 20th, 1; 21st, 10; 23d, 1; 24th, 1; 25th, 4; 28th, 2.

COMPARATIVE DATA FOR APRIL.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	52.0	..	...	2.81	....	....	....	..	..	..
1892	50.6	87	17	4.28	....	....	....	..	..	..
1893	53.4	92	20	5.18	8.98	2.91	0.8	8	8	14
1894	50.6	90	14	3.32	5.30	1.97	1.6	12	8	10
1895	52.9	90	17	2.93	5.47	0.90	....	11	9	10
1896	57.7	95	12	2.06	4.35	0.82	. ..	13	12	5
1897	51.5	90	19	2.97	7.10	1.58	....	11	10	9
1898	48.0	86	2	3.14	4.86	1.40	. ..	10	9	11
1899	53.4	93	18	1.84	3.17	0.92	0.5	13	9	8
1900	51.8	88	16	1.35	2.08	0.43	T.	14	7	9
1901	47.5	95	18	7.05	10.70	4.95	6.0	10	4	16
1902	49.8	96	21	3.06	4.57	1.53	10.0	10	10	10
1903	51.3	91	8	4.47	7.30	2.29	0.4	11	8	11
1904	47.7	82	12	3.15	5.71	1.12	1.3	9	9	12
1905	52.2	89	14	2.78	5.57	1.16	1.5	11	9	10
1906	54.1	92	15	3.16	6.59	0.57	0.3	15	8	7
1907	45.6	92	10	3.49	6.66	1.42	6.1	8	8	14
1908	54.8	92	18	4.30	8.02	0.77	0.3	13	8	9
1909	53.0	93	10	5.04	8.57	1.70	2.4	10	11	9
1910	53.2	91	16	3.39	9.07	1.65	0.6	10	8	12
1911	49.5	88	6	4.29	7.00	0.83	1.5	9	8	13
1912	55.4	88	20	4.03	8.00	1.09	0.2	11	10	9
1913	52.4	92	12	2.99	5.48	1.61	0.1	14	6	10
1914	52.1	93	16	4.63	10.05	1.29	0.2	10	9	11
1915	55.5	101	10	1.93	5.69	0.10	T.	15	8	7
1916	50.5	90	17	3.07	5.70	1.25	4.3	9	7	14
Means and Extremes	51.8	101	2	3.49	10.70	0.10	1.9	11	8	11

Climatological Data for April, 1916.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	14	45.1	−1.9	79	20	20	7	41	4.16	+0.10	0.87	14.5	15	4	8	18	w.	G. C. Dixon
Burlington	Mineral	875	22	50.0	−0.8	83	20	25	7	46	4.20	+1.64	1.58	7.0	7	7	17	6	w.	J. W. Vandiver
Harpers Ferry††	Jefferson	244	27	.....	.....	.....	.....	.....	.....	.....	3.64	+0.76	0.72	2.8	8	.....	.....	.....	w.	S. W. Lightner
Lost City	Hardy	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. D. Hinegardner
Martinsburg	Berkeley	435	24	51.5	0	85	20	30	11	43	4.05	+1.14	.....	T.	10	16	9	5	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	.....	.....	.....	.....	.....	.....	.....	3.41	+0.63	1.37	.....	10	.....	.....	.....	.....	M. S. Henkel
Piedmont	Mineral	919	0	49.0	.....	84	20	27	11	45	2.51	.....	0.77	8.0	11	8	9	13	nw.	C. A. Suter, Jr
Romney	Hampshire	824	19	53.7	+2.3	90	20	25	11	53	4.01	+1.44	1.26	7.0	10	5	16	9	.....	Geo. E. Arnold
Upper Tract	Pendleton	1,230	18	50.3	−1.1	85	20	24	7	47	2.56	+0.23	0.76	3.0	7	16[a]	4[a]	9[a]	.....	J. M. Mallow
Averages and	Extremes	.....	.....	49.9	−0.3	90	20	20	7	53	3.57	+0.85	1.58	6.0	10	9	11	10	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	51.6	−0.7	86	20	27	7	38	2.24	−1.88	0.46	1.0	12	18	3	9	.....	J. D. Riggs
Brandonville	Preston	1,809	6	.....	.....	.....	.....	.....	.....	.....	2.63	.....	0.43	.....	13	.....	.....	.....	.....	W. T. Miller
Buckhannon	Upshur	1,411	20	50.3	−0.7	84	20	27	7	39	3.97	−0.29	0.60	T.	12	15	1	14	.....	H. A. Darnall
Cairo	Ritchie	674	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Van A. Zevely
Central Station[e]	Doddridge	950	19	50.7[c]	−0.6	86[c]	20	25[c]	10[c]	51[c]	2.32	−0.49	0.54	T.	15	3[d]	6[d]	17[d]	w.	D. H. Doak
Cheat Bridge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.70	.....	1.25	16.0	11	.....	.....	.....	.....	
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	3.50	.....	.90	6.0	7	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	15	52.4	−0.5	88	20	25	7	42	3.05	−0.96	0.86	1.0	11	5	3	22	w.	J. M. Reed
Davis	Tucker	3,093	8	.....	.....	.....	.....	.....	.....	.....	4.21	.....	0.88	7.0	15	14	3	13	sw.	Ross C. Male
Elizabeth	Wirt	646	5	.....	.....	.....	.....	.....	.....	.....	3.08	.....	0.76	.....	14	.....	.....	.....	.....	E. D. Ball
Elkins	Randolph	1,940	16	48.0	−0.3	83	20	23	7	42	3.43	+0.14	0.89	2.4	18	1	8	21	w.	U. S. Weather Bureau
Fairmont	Marion	883	11	49.6	−2.9	89	20	25	7	44	2.64	−0.91	0.42	1.0	16	16	1	13	w.	F. P. Hall
Glenville	Gilmer	738	23	52.0	−1.2	87	20	25	7	50	2.65	−1.12	0.57	2.0	11	3	13	14	w.	M. T. Brannon
Grafton	Taylor	1,000	24	52.4	+0.8	87	20	25	8	47	3.38	−0.35	0.76	1.0	13	11	7	12	w.	Joseph Gerken
Lost Creek	Harrison	1,026	19	50.5	+0.5	86	20	24	7	45	2.11	−1.39	0.50	1.0	11	11	3	16	w.	Allen Smith
Mannington	Marion	974	14	49.7	−1.8	85	20	23	7	42	3.03	−1.08	0.62	3.6	17	6	6	18	w.	Jas. A. Morgan
Morgantown	Monongalia	1,250	24	50.6[a]	−0.8	84	20	25[a]	7	36[a]	2.86	−0.58	0.48	T.	16	11	3	16	s.	Prof. Edgar L. Andrew
Moundsville	Marshall	612	14	51.6	−0.6	87	20	25	7	40	2.28	−0.89	0.63	T.	10	11	6	13	sw.	M. Z. White
New Cumberland	Hancock	987	19	48.1	−1.4	85	20	21	7	44	3.54	+0.01	0.69	5.0	14	4	17	9	sw.	M. F. Smith
New Martinsville	Wetzel	631	23	52.4	−0.8	86	20	26	7	40	2.90	−0.68	0.52	T	13	12	4	14	s.	Wm. Ankrom
Parkersburg	Wood	638	28	52.5	−0.5	86	20	32	7	32	2.84	−0.07	1.28	1.0	15	7	8	15	nw.	U. S. Weather Bureau
Parsons	Tucker	1,656	17	47.3	−5.1	83	19	19	8[f]	46	4.33	+0.46	1.57	8.0	.....	5	10	15	.....	J. W. Swisher
Philippi	Barbour	1,149	20	52.4	+1.2	86	20	25	7	42	1.80	−2.24	0.32	.....	11	7	9	14	w.	Okey J. Robinson
Pickens	Randolph	2,697	11	47.2	−1.3	87	20	22	7	46	4.58	−0.52	1.05	14.0	14	8	9	13	w.	Dr. J. L. Cunningham
Rowlesburg	Preston	1,375	30	.....	.....	.....	.....	.....	.....	.....	3.58	−0.45	0.48	4.5	15	.....	.....	.....	.....	J. F. Pierce
Saint Marys	Pleasants	577	8	.....	.....	.....	.....	.....	.....	.....	2.78	.....	0.72	.....	11	.....	.....	.....	w.	Wm. Hughes
Smithfield	Wetzel	835	11	49.2	−2.8	87	20	23	7	43	2.44	−1.31	0.41	1.0	13	16	7	7	nw.	G. M. Whisler
Terra Alta	Preston	2,612	16	45.6	−2.1	76	20	19	4	51	3.17	−0.87	0.76	6.0	8	12	3	15	w.	C. F. Dodge
Wellsburg[d]	Brooke	1,225	16	47.8	−1.1	80	20	24	7	52	2.24	−0.90	0.42	3.0	14	5	12	13	nw.	C. P. Waugh
Weston	Lewis	1,026	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss C. M. Davis
Wheeling	Ohio	645	30	50.7	.....	89	20	26	7	42	2.78	−0.34	0.50	0.2	14	10	9	11	w.	Miss M. B. Forsyth
Averages and	Extremes	.....	.....	50.1	−1.1	89	20	19	4†	51	3.09	−0.73	1.57	3.3	13	9	7	14	w.	
Southern Division.																				
Bancroft	Putnam	574	12	52.0	−1.8	82	19†	27	10	44	3.01	−0.85	0.85	1.0	.....	12	1	17	ne.	R. E. Dent
Beckley	Raleigh	2,440	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John A. Ewart
Bluefield ††	Mercer	2,558	21	50.9[d]	−2.9	80[d]	20	17[d]	7[d]	50[d]	1.50	−1.55	0.45	8.5	7	12[d]	5[d]	9[d]	.....	Norfolk & Western Ry
Charleston	Kanawha	597	13	57.2	+0.4	85	19†	29	7	46	4.21	+0.59	1.35	T.	13	13	4	13	w.	C. V. Lewis
Clay	Clay	706	0	.....	.....	.....	.....	.....	.....	.....	1.25	.....	0.35	3.0	4	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba ††	Jackson	650	14	54.4	+1.8	88	20	23	10	46	2.36	−0.94	0.60	1.0	10	3	19	8	w.	C. T. Perry
Dam 22 O. R	Jackson	598	.....	.....	.....	.....	.....	.....	.....	.....	2.20	.....	0.57	.....	10	.....	.....	.....	w.	U. S. Engineer Office
Dam 26 O. R	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.87	.....	0.94	1.5	10	.....	.....	.....	sw.	.....
Dunlow	Wayne	703	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	sw.	James W. Damron
Elkhorn	McDowell	1,935	23	52.8	−0.4	81	20†	22	10	54	2.94	−0.69	0.74	6.0	10	11	11	8	w.	J. J. Lincoln
Evans	Jackson	606	0	.....	.....	.....	.....	.....	.....	.....	3.15	.....	0.82	1.0	9	9	6	15	.....	B. F. Sayre
Green Sulphur Spgs	Summers	1,600	20	50.0	−1.0	86	13†	17	10	48	3.35	+0.12	0.80	14.0	10	12	1	17	e.	W. H. Gwinn
Hinton	do	1,450	19	50.8	−2.6	85	13†	25	10	47	2.86	−0.93	1.16	5.0	10	10	4	16	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	47.6	.....	83	20	18	10	41	3.58	.....	0.90	8.0	10	10	4	16	.....	R. E. Ferguson
Huntington	Cabell	558	20	54.2	+0.2	85	20	30	10†	39	2.80	−0.94	0.84	1.5	11	11	1	18	w.	L. H. Hutchinson
Lewisburg	Greenbrier	2,200	16	49.0	−1.2	80	13†	24	7	39	3.13	−0.05	1.00	10.0	8	12	4	14	nw.	Geo. T. Argabrite
Logan	Logan	687	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Oliver, Jr
Madison	Boone	704	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley
Marlinton	Pocahontas	2,131	17	44.3	−3.3	78	20	20	7	42	3.10	−0.01	0.81	10.0	9	1	22	7	sw.	S. L. Brown
Nuttallburg	Fayette	2,252	23	.....	.....	.....	.....	.....	.....	.....	2.80	−0.52	0.80	14.0	7	.....	.....	.....	.....	Miss Donna Fully
Point Pleasant	Mason	553	23	53.7	−1.3	89	20	27	7	41	2.62	−0.69	0.82	T.	13	5	5	20	sw.	W. D. Holmes
Powellton [b]	Fayette	933	20	51.6	−2.9	88	20	22	10	51	3.10	−0.53	.....	.....	.....	.....	.....	.....	.....	S. C. Lampert
Renick	Greenbrier	1,653	0	.....	.....	.....	.....	.....	.....	.....	2.35	.....	0.80	7.5	6	.....	.....	.....	nw.	Wm. B. Hill
Robertsburg	Putnam	574	16	51.8	−1.4	87	13	26	7	50	2.39	−1.28	0.75	T.	11	10	1[a]	18[a]	sw.	E. C. Brace, Jr
Ryan	Roane	700	13	49.8	−3.0	85	20	24	7	51	3.64	−0.19	1.02	2.0	12	10	6	14	.....	Wm. E. Ryan
Spencer ††	do	784	12	52.1	−0.6	89	20	23	7	48	2.78	−0.61	.44	0	11	12	6	12	.....	A. M. McKown
Sutton	Braxton	839	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ben Gillespie
Union	Monroe	2,250	12	49.3[a]	−1.8	83[c]	12	25	7[f]	50	2.70	−0.32	0.90	7.0	.....	.....	.....	.....	.....	J. C. Shanklin
White Sulphur Springs	Greenbrier	1,940	6	49.6	.....	82	20	22	7[f]	44	2.76	.....	0.80	8.0	12	16	3	11	w.	J. M. Ayres
Williamson	Mingo	660	16	54.1	−1.3	86	20	30	14	44	2.91	−1.14	1.08	0	12	12	6	12	w.	J. F. Keyser
Averages and	Extremes	.....	.....	51.3	−1.3	89	20	17	10	51	2.88	−0.55	1.35	4.8	10	10	6	14	w.	
State Averages and	Extremes	.....	.....	50.5	−1.1	90	20	17	10	53	3.07	−0.42	1.58	4.3	12	9	7	14	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for April, 1916.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac		.02	.34	.04		T.		.60	.60		T.	.03		.43			.37				.37	.13	.15	.03	.87	17	.01	T.				4.16
Burlington	do			.42					.40	.30		1.00			T.			T.				.30		T		1.58	.20	T.					4.20
Franklin	do																																
Harpers Ferry	do				.22				.65	.40					.20								.72			.42	.58	.45					3.64
Lost City	do																																
Martinsburg	do			.28			.05		*	1.05		.12		.40				.08				.70				.98	.39						4.05
Moorefield	do																																
Piedmont	do			.32		.04			.77	.22					.05							.62	.08	.07	T.	T.	.28	.04	.02				2.51
Romney	do				.35	T.			.36	.30			.05		.07			.08				1.04	.15			1.26	.35	T.	T.	T.	T.		4.01
Upper Tract				.60	T.				.25	.10					T.			T.				.75		T.	T.	.76	T.	T.	.05	.05			2.56
Northern Division.																																	
Bens Run	Ohio		.20	.11					.45	.10							.04	.21				.46	.11	.06		.15	.20	.15					2.24
Brandonville	Monongahela		.14	.10	.14	.03						.10				.42		.08					.43	.24	.05	.35	.20	.35	T.				2.63
Buckhannon	do			.60	.10				.40	.01		.25			.30			.50				.22	.32			.60	.22	T.		.45			3.97
Cairo	Little Kanawha																																
Central Station	Middle Is. Creek		.11	.08	.04				.54	.09	.01		.05					.29				.21	.09	.11	.25	.25		.16	.04				2.32
Great Bridge					.30		.15				1.20			.05		.70			.40				1.18	.07			1.25		.35	.05			5.70
Cortland	Monongahela			.40				.20		.60	.70												.90		.22	.48							3.50
Creston	Little Kanawha		T.	.24	.21				.86	.20	.06					.20		.16					.36			.40	T.	.23	.13	T.			3.05
Davis	Monongahela			.30	.27	.02			.15	.30	.15		.07		.07	.56		.37					.55	.18	.12	T.	.88	.22					4.21
Elizabeth	Little Kanawha		.05	.14	.28	.01			.76	.13	.05					.18		.24			.04		.39		.01	.30		.56					3.08
Elkins ***	Monongahela	T.	.01	.58	.01	.03		.03	.26	.15		.03		T.	.46			.39				T	.30	.02	.05	.15	.75	.12	.05	.04			3.43
Fairmont	do		.12	.14	.11	.05			.37	.25	.04		.03		T.	.20		.13					.42	.08	.03	.32	T.	.32		.03			2.64
Glenville	Little Kanawha		T.	.42	.18	.22			.34	.12	.08							.26					.36			.37	.20	.10					2.65
Grafton	Monongahela		.12		.33	.02			.50	.30	.03				.05			.38				.12	.06	.78		.33	.36						3.38
Lost Creek	do		T.	.28	.10				.50	.03		T			.20			T.				.22	.12	.05		.31	.17	T.	.13				2.11
Mannington	do	T.	.20	.08	.07				.62	.15	.01	T.	T.		.19			.24				18	.09	.09	.07	.13	.35	.02	.49	.04			3.03
Morgantown	do		.28		.07	.01			.23	.30			.15		.15			.16				.07	.40	.09	.03	.48	.30	.08	.06				2.86
Moundsville	Ohio																																
New Cumberland	do	.14	T	.17	T.				.50	.10		.19		T.	.56			.30				T.	.69	.10	.10		.02	.07	.50	.10			3.54
New Martinsville	do		.20	.35					.52	.10	T.				.12		.20						.42	.10	.12		.05	.27	.20	.25			2.90
Parkersburg ***	Ohio	.11	.01	.09	.04			.04	.48	.02		T.			.10			.12				1.28	.05	.02	.22		.20	.06					2.84
Parsons	Monongahela		T.	*	*	*	*	.68		.60					T.			1.57				T.	T.	T.	.33	.73			.42				4.33
Philippi	do			.32	.02				.20	.26		.06			.15			.20					.02			.25		.27	.05				1.80
Pickens	do		T.	.45	.06	T.			.33	.60	.27	T			.40			.57			.05	.28	.08	.04		1.05	.24	.11		T.			4.58
Rowlesburg	do		.12	.14	.22	.06			.40	.36	.10						.30	.24					.36	.32	.08	.48	.16	.24		T.			3.58
Saint Marys	Ohio		.15	.13	.18				.45	.17	T.		.03					.38					.72	.12		.20	T.	.25	T.	T.			2.78
Smithfield	Fishing Creek		.22	.08					.34	.26	.06		.02		.02	.12		.10					.32	.27				.23		.41			2.44
Terra Alta	Monongahela						.22		.45	.15		T.										.71	.76	T.	.36		.40		.12				3.17
Wellsburg	Ohio	.02	.03	.14	.02				.30			T.		.18	.12			.11				.31	.10	.11			.28	.42	.10				2.24
Weston	Monongahela																																
Wheeling	Ohio		.20	.17	.10				.32	.25	.01		T.		.04	.12		.14				T	.50	.25	.02	T.		.50	.10				2.78
Southern Division.																																	
Bancroft	Great Kanawha			.50	.06				.85	.28	.15		.05					*	*				.33			.32	.05	.31	.14				3.04
Beckley	do																																
Bluefield	do					.45		.30	.35	.20																.20	.30		.10				1.90
Charleston	do		T.	.30	.20				1.10	.25	.35					.04		.38				T.	.37	.04		.58	.05	.35	.20				4.21
Clay	do			T.	T.	T.			.30	T.													.30		.30		T.	.35	T.				1.25
Cuba	Sand Creek		.07	.30	.33				.60	.10				T.	T.			.04				.30	T.			.30	.22	.10					2.36
Dam 22 O. R.	Ohio		.03	.25	.36				.57	.06	T.							.12								.40	.03	.36	.04				2.20
Dam 26 O. R.	do			.37	.20				.64	.30	T		.03					.20					.55			.22		.32	.04				2.87
Dunlow	Big Sandy																																
Elkhorn	do				.74	.20		.30	.20	.10								.35				.12				.52	.30		.11				2.94
Evans	Ohio			.47	.36				.82	.16								.32				.24	T.			.30	.34	.12					3.13
Green Sulphur Spgs.	Great Kanawha		.10			.20	.45	.20	.80	.40												.30				.35	.45	.10	T.				3.35
Hinton	do			.14			.60		1.16	.12	.04						.04	.08					.18			.40		.10	T.	T			2.86
Holcomb	do		.12			.21			*	.89			.08		.14			.40				.32				.90		.47					3.58
Huntington	Ohio		T.	.30	.14				.84	.14	.02							.08					.36			.38	.14	.30	.10	T.			2.80
Lewisburg	Great Kanawha			.20		.41		T	1.00	T.					T.			.07				.70				.53	.18	.04	.32				3.13
Logan	Guyandotte																																
Marlinton	Great Kanawha			.32	T.	.33			.80	.20		T.	.10		.16								T.	T.		.81	.26	.06	T.				3.10
Nuttallburg	do					.20		T.	.60	.80					.20							.20				.50	.30						2.80
Point Pleasant	Ohio		.06	.34	.25				.74	.08	.04		.02					.16					.23			.26	.22	.14	.08				2.62
Powellton	Great Kanawha				.40	.50		.10	.60	.30					.10		*	*	*	*	*	*	*	*	*	*	*	*	1.10				3.10
Renick	do			.50			.40		.70		.05															.80		.10					2.35
Robertsburg	do			.55	.10				.75	*	.20	T.						.11					.31			.22	.06	.23	.06				2.59
Ryan	do		T.	.67	.11	.01			1.02	.27		T.			.11			.25				.40	.02	T.		.17	.45	.16	T.				3.64
Spencer	Little Kanawha			.44	.20				.25	.20	.12							.30					.37	T.		.20		.40	.10	.20			2.78
Sutton	Great Kanawha																																
Union	do		.10			.20		.70	T.	T								T.				.90			*	*	*	.80					2,70
White Sulphur Spgs.	do			.14		.05	.16		.80						.04			.18				.37	.09			.65	.21	.02		.05			2.76
Williamson	Big Sandy			.08			.04		1.08	.30	.04							.05				.02	.42			.18	.04	.60	.06				2.91

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

" Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for April, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mea
Panhandle Division.																																	
Bayard	Maximum	67	64	47	47	53	47	42	37	32	42	53	61	70	64	63	69	60	55	67	79	71	53	41	47	44	52	48	52	60	73	..	55.
	Minimum	42	44	29	29	34	33	20	29	25	28	29	40	45	41	30	40	44	36	40	38	49	35	31	37	32	30	32	38	34	32	..	34.
Burlington	Maximum	77	70	49	46	60	60	48	46	42	50	63	68	80	73	65	73	74	64	70	83	75	56	53	60	53	60	58	58	67	75	..	62.
	Minimum	38	46	33	35	37	37	25	32	30	34	29	48	41	42	36	33	50	45	34	37	45	47	41	37	41	33	33	39	33	35	..	37.
Martinsburg§	Maximum	74	60	41	45	62	62	52	36	45	54	65	71	75	75	67	73	69	64	70	85	78	58	55	61	50	62	62	65	70	79	..	62.
	Minimum	42	47	40	35	33	36	32	32	32	34	30	33	49	50	40	39	42	47	41	42	46	51	45	43	47	40	36	43	39	41	..	40.
Piedmont	Maximum	74	64	44	44	59	54	49	44	38	51	60	65	75	69	70	73	64	60	71	84	73	50	47	55	53	57	56	55	71	78	..	60.
	Minimum	40	44	33	34	38	35	28	30	31	31	27	45	42	45	37	37	48	41	35	39	45	42	38	40	40	36	35	42	35	37	..	37.
Romney	Maximum	82	83	61	48	64	65	55	48	46	53	65	73	85	80	70	76	71	65	74	90	85	68	60	64	62	63	60	61	70	80	..	67.
	Minimum	40	41	32	35	31	40	27	30	30	33	25	47	42	50	38	35	50	45	37	37	64	60	53	54	38	34	33	44	34	36	..	39.
Upper Tract	Maximum	69	73	70	51	60	55	49	45	40	49	62	70	75	75	65	72	70	61	75	85	82	82	55	57	53	60	56	52	52	73	..	63.
	Minimum	30	40	31	32	35	37	24	30	27	31	29	52	47	47	35	37	50	50	33	38	52	50	40	44	38	30	30	36	36	34	..	37.
Northern Division.																																	
Bens Run	Maximum	72	53	54	53	57	51	50	45	42	54	64	71	75	69	67	81	68	66	80	86	70	56	50	53	52	50	54	67	72	71	..	61.
	Minimum	44	45	42	44	36	36	27	33	35	31	32	43	47	47	34	43	51	42	44	49	55	43	40	45	45	37	42	45	41	43	..	41.
Buckhannon	Maximum	73	57	48	53	58	53	48	47	40	50	62	68	78	65	60	77	65	64	76	84	74	56	50	54	51	52	53	59	66	72	..	60.
	Minimum	40	45	44	44	38	33	27	33	32	30	28	45	48	48	34	38	52	40	48	46	55	42	40	40	42	31	41	47	38	37	..	40.
Creston	Maximum	76	70	55	57	62	54	50	48	44	56	66	72	77	73	65	82	74	69	83	88	76	58	53	61	56	50	51	63	72	79	..	64.
	Minimum	39	45	43	45	36	32	25	33	34	29	29	43	48	53	33	40	55	35	42	47	57	44	41	45	45	30	40	42	37	38	..	40.
Elkins	Maximum	73	52	48	53	57	50	48	41	35	48	60	66	77	68	63	72	63	59	78	83	71	47	46	50	49	52	52	53	64	76	..	58.
	Minimum	37	42	40	40	40	29	23	31	29	30	26	46	46	42	32	42	45	40	38	45	50	40	37	41	34	29	36	41	37	34	..	37.
Fairmont§	Maximum	76	53	49	51	61	52	47	41	40	54	62	68	77	65	66	79	62	65	78	89	68	48	51	53	52	53	57	60	73	79	..	61.
	Minimum	33	43	41	40	34	32	25	28	32	29	28	32	45	59	33	38	53	37	37	45	53	43	37	40	42	31	36	41	38	38	..	38.
Glenville	Maximum	78	73	58	54	63	55	51	50	44	58	63	74	79	78	69	81	80	69	83	87	86	70	52	62	62	60	55	64	74	81	..	67.
	Minimum	39	46	44	43	36	33	25	33	34	31	27	40	48	47	31	31	46	35	33	39	50	36	35	38	37	34	33	38	31	37	..	37.
Grafton	Maximum	80	69	60	54	54	55	49	56	46	52	61	71	78	72	65	79	78	66	79	87	83	65	50	54	54	55	60	68	71	76	..	64.
	Minimum	40	42	43	41	38	30	30	25	31	30	28	45	47	50	31	41	54	40	32	46	57	50	38	45	41	39	40	44	38	38	..	39.
Lost Creek	Maximum	75	64	51	52	59	51	46	47	42	54	64	70	77	69	62	80	74	65	80	86	73	57	50	55	54	51	63	60	65	75	..	62.
	Minimum	39	42	42	39	38	34	24	33	33	28	26	45	48	50	30	35	52	37	36	45	56	41	39	44	42	29	40	38	35	38	..	38.
Mannington	Maximum	75	67	50	51	58	53	46	45	39	52	61	66	74	72	62	77	73	63	74	85	82	56	49	52	53	52	56	60	68	74	..	61.
	Minimum	39	43	42	40	32	30	23	33	33	27	26	38	42	50	31	39	52	35	35	43	55	43	37	43	43	30	37	44	37	35	..	37.
Morgantown	Maximum	73	59	46	50	56	51	45	46	37	50	59	64	72	69	60	78	75	60	76	84	80	56	48	57	51	54	53	51	70	70	..	60.
	Minimum	49	42	39	38	36	37	25	32	31	29	36	45	52	47	35	48	47	48	40	59	55	42	37	41	42	36	38	..	40	45	..	41.
New Cumberland	Maximum	72	50	49	53	57	51	47	48	42	53	62	57	72	74	64	79	81	66	63	85	69	63	47	55	54	54	53	63	67	74	..	60.
	Minimum	33	34	36	36	27	27	21	28	30	35	30	32	45	41	37	41	44	36	31	41	50	39	35	34	41	31	35	42	33	36	..	35.
New Martinsville	Maximum	78	56	50	56	57	55	54	45	41	55	63	68	75	72	70	80	75	72	78	86	83	65	50	55	55	52	55	65	72	78	..	63.
	Minimum	47	45	42	44	34	33	26	34	35	30	30	42	47	51	34	40	51	38	41	48	56	44	40	45	45	35	42	46	40	40	..	40.
Parkersburg	Maximum	74	52	54	58	57	48	47	40	41	54	67	70	76	71	62	80	65	64	80	86	72	50	51	53	52	52	51	64	70	76	..	61.
	Minimum	49	46	44	46	42	36	32	34	34	32	38	48	58	47	38	49	48	44	49	59	50	44	42	46	42	40	41	45	44	44	..	43.
Parsons	Maximum	74	60	50	57	57	49	40	52	33	49	59	66	76	65	66	76	65	76	83	70	53	46	49	50	54	56	57	56	66	76	..	59.
	Minimum	34	38	39	40	38	22	31	19	19	20	24	36	40	46	32	39	44	30	38	47	41	35	41	35	33	35	42	43	35	37	..	35.
Philippi	Maximum	75	63	50	57	58	54	50	46	43	53	61	71	85	79	64	79	83	64	80	86	81	58	79	50	54	54	55	60	66	75	..	64.
	Minimum	48	42	41	42	37	36	25	32	31	29	35	45	54	49	33	45	41	40	50	54	41	41	37	45	40	32	38	43	46	41	..	40.
Pickens	Maximum	74	53	45	50	56	47	45	41	31	54	66	64	85	67	69	73	61	60	81	87	69	63	42	50	45	46	46	53	58	69	..	58.
	Minimum	41	40	38	43	38	32	22	28	24	24	28	34	52	42	30	43	45	33	35	48	45	37	35	38	35	30	34	36	34	43	..	36.
Terra Alta	Maximum	45	42	42	40	40	42	46	40	40	40	50	58	68	60	56	65	68	66	70	76	73	50	50	45	52	54	51	50	68	73	..	54.
	Minimum	33	33	33	19	29	29	36	33	33	30	30	40	46	38	38	49	48	48	52	53	50	38	32	32	38	39	32	38	37	42	..	37.
Wellsburg	Maximum	70	45	44	50	52	47	43	41	36	48	58	58	70	64	62	75	69	60	59	80	70	53	45	50	53	53	52	59	66	70	..	56.
	Minimum	45	38	36	39	34	33	24	31	31	28	32	42	48	43	32	46	46	38	40	48	53	39	32	39	42	35	40	43	41	46	..	39.
Weston§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wheeling§	Maximum	74	52	47	55	67	55	46	46	42	59	66	67	75	62	70	83	61	63	70	89	73	50	50	52	60	55	55	70	74	81	..	62.
	Minimum	32	43	39	38	32	31	26	29	34	29	30	39	41	57	33	41	44	38	39	47	60	45	40	39	45	37	42	44	40	39	..	39.
Southern Division.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bluefield	Maximum	70	65	65	53	57	53	49	37	35	..	59	70	78	71	66	66	..	..	..	80	75	59	56	61	60	53	45	54	64	66	..	60
	Minimum	50	43	40	39	43	37	27	29	27	..	35	52	55	57	36	50	..	..	..	55	54	40	42	38	40	37	35	41	37	40	..	41
Charleston	Maximum	75	72	69	67	66	64	63	64	60	59	69	78	84	80	76	80	79	77	85	85	82	75	78	78	73	70	66	65	72	81	..	73
	Minimum	39	42	42	44	46	36	29	31	32	30	33	38	51	58	38	46	56	37	39	49	56	39	45	44	46	38	42	44	30	41	..	41
Elkhorn	Maximum	72	72	60	53	58	53	52	39	35	49	61	70	80	79	67	75	73	64	78	81	81	58	57	65	65	56	49	56	65	73	..	63
	Minimum	42	44	44	44	43	40	31	31	29	22	36	57	52	55	37	54	56	39	44	52	57	43	40	37	44	40	38	43	38	41	..	42
Green Sulphur Spgs.	Maximum	78	67	56	57	58	59	47	42	36	59	65	78	83	70	71	73	67	65	82	83	72	56	55	73	68	57	48	55	67	78	..	64
	Minimum	34	40	41	39	34	34	24	29	28	17	24	45	40	45	31	40	51	33	34	46	50	45	34	33	37	29	36	35	30	33	..	35
Hinton§	Maximum	77	58	49	59	61	59	47	39	37	53	65	75	85	70	68	74	67	68	81	85	72	60	58	68	57	51	51	56	68	78	..	63
	Minimum	38	40	44	41	40	39	28	30	31	25	26	28	45	49	39	43	50	37	38	45	53	44	38	37	42	34	37	40	36	37	..	38
Holcomb§	Maximum	75	69	50	55	58	50	41	41	38	48	62	70	79	64	69	73	60	62	78	83	68	50	46	61	51	49	45	54	60	75	..	59
	Minimum	39	46	42	41	34	37	38	22	30	18	24	36	41	46	30	40	42	30	34	42	50	39	38	40	36	30	36	32	30	32	..	35
Huntington§	Maximum	76	56	60	61	56	54	46	42	42	58	69	78	80	68	66	80	65	66	84	85	72	57	59	67	64	56	55	67	72	80	..	64
	Minimum	41	47	42	45	47	38	31	33	33	30	30	43	52	63	40	41	55	42	47	54	61	45	45	47	46	43	44	43	41	41	..	43
Lewisburg	Maximum	72	62	54	59	57	54	45	39	34	47	61	70	80	74	65	69	62	60	77	80	73	72	51	64	59	49	49	55	64	71	..	60
	Minimum	35	41	40	38	35	34	24	30	29	24	24	49	43	51	32	41	51	35	38	44	52	42	40	39	39	31	31	31	31	36	..	37
Madison§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marlinton	Maximum	66	60	52	56	52	46	40	34	34	42	54	64	72	68	62	66	56	54	70	78	66	48	44	54	50	42	48	50	56	68	..	55
	Minimum	30	40	38	35	32	32	20	28	26	24	22	44	38	44	30	32	44	30	32	36	46	38	40	40	34	26	30	30	30	32	..	33
Point Pleasant	Maximum	76	62	56	64	60	55	48	48	42	58	69	77	81	76	64	83	72	69	84	89	82	62	55	65	61	56	53	66	73	79	..	66
	Minimum	43	43	40	45	37	34	27	30	31	27	32	46	55	54	33	42	52	38	46	51	55	42	37	44	42	37	39	39	39	57	38	41
Powellton	Maximum	78	70	62	57	58	55	52	41	40	54	66	75	84	80	69	..	..	..	..	88	..	..	..	..	..	65	60	59	58	70	80	64
	Minimum	50	42	35	47	43	35	29	32	28	22	27	42	53	56	37	..	..	..	..	..	..	..	..	37	38	31	35	41	37	50	..	38
Robertsburg§	Maximum	75	58	60	62	55	50	48	49	40	38	77	75	87	65	65	85	63	65	82	86	70	56	55	64	59	55	59	68	71	80	..	63
	Minimum	38	44	42	43	39	31	26	30	32	32	27	35	49	55	31	39	54	34	42	52	58	41	41	44	43	35	40	40	36	38	..	39
Ryan	Maximum	75	63	56	56	56	50	47	45	37	58	65	72	60	55	68	78	74	56	77	85	63	57	55	61	55	56	50	63	69	72	..	64
	Minimum	36	43	43	45	31	30	24	32	32	27	28	43	38	45	30	41	50	30	43	44	57	43	44	45	42	33	40	41	35	36	..	38
Spencer§	Maximum	80	69	54	58	63	61	52	40	40	57	69	75	80	70	63	60	70	81	85	89	61	50	53	60	60	54	51	62	71	81	..	64
	Minimum	38	48	43	43	35	30	25	31	32	28	27	40	49	57	31	40	54	33	41	45	55	41	40	45	44	41	39	41	35	36	..	38
Union§	Maximum	73	66	59	58	52	54	42	38	45	61	75	83	78	62	71	69	65	81	82	78	56	55	52	65	52	52	52	56	74	..	..	62
	Minimum	37	40	40	38	35	38	25	30	25	32	25	35	46	50	34	45	42	39	35	36	45	41	38	35	39	33	31	33	31	36	..	36
White Sulphur Spgs.	Maximum	71	70	58	63	60	61	52	37	36	56	64	72	80	77	69	72	69	64	79	82	78	57	55	64	56	53	52	58	67	75	..	63
	Minimum	32	37	4	37	40	29	22	36	30	24	22	52	39	47	32	35	52	37	36	40	52	41	37	37	38	36	32	30	31	33	..	35
Williamson§	Maximum	80	55	62	58	62	61	41	42	41	5	70	77	84	71	70	80	66	70	85	86	65	65	64	70	63	54	50	64	72	80	..	65
	Minimum	38	44	45	5	48	40	32	32	32	32	30	34	53	59	39	42	62	40	41	46	50	47	42	41	43	47	40	15	42	43	..	42

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
H. H. F.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MAY, 1916

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JUNE 24, 1916

Departure of the Mean Temperature from the Normal, May, 1916.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXIV. PARKERSBURG, W. VA., MAY, 1916. NO. 5.

GENERAL SUMMARY.

The temperature for May averaged considerably above the normal, the rainfall slightly below, and the sunshine normal. While the rainfall was well distributed throughout the month, the distribution over the State was somewhat unfavorable. Unseasonably cool weather near the end of the second decade caused considerable damage to fruit and slight damage to early vegetation; but at the close of the month wheat, rye, corn, potatoes, berries, grass, and pastures were generally in excellent condition. Peaches and apples were scarce in sections. Farm work was considerably retarded by frequent showers.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins were 29.97 and 29.96 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.31 inches on the 12th, and 29.66 inches on the 10th. Elkins, 30.28 inches on the 12th, and 29.61 inches on the 16th.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 64.0°. The mean departure from the normal for 41 stations having ten or more years of record was +2.2°. Warm weather prevailed until the 16th, except the 4th, 8th, 10th, and 12th, when the temperatures were slightly below the normal. Unseasonably cool weather prevailed from the 17th to the 22d, with light to killing frosts on the 19th, when the temperature fell to the freezing point or slightly below at 14 of the more elevated stations. Considerable damage resulted to fruit but vegetation was only slightly injured. The highest temperatures of the month occurred at most stations from the 26th to the 28th, but much cooler weather set in on the 30th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 72 per cent; 8 p. m., 64 per cent. The May averages for the same hours for the past 27 years are 75 and 64 per cent, respectively. Elkins, 8 a. m., 74 per cent; 8 p. m., 61 per cent. The May averages for Elkins for the same hours for the past 15 years are 80 and 65 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 62 stations reporting, was 3.55 inches. The departure from the normal for 47 stations having ten or more years of record was — 0.28 inch. Over the northern counties the amounts were generally near the normal, while marked deficiencies were noted over the eastern panhandle counties and generally moderate deficiencies over the southern counties. Showers occurred daily in most sections from the 3d to the 8th, 16th to the 18th, 22d to the 24th, and 26th to the 30th, and the rainfall was moderately heavy on the 6-7th, 22d-23d, and 29-30th.

WIND.

The average wind velocity at Parkersburg was 5.8 miles per hour, or 0.6 mile above the May average for the past 26 years. The average at Elkins was 4.6 miles per hour, or 0.7 mile above the May average for 15 years. The highest velocity at Parkersburg was 32 miles per hour from the northwest on the 17th, and at Elkins 26 miles per hour from the west on the 17th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 55 per cent of the possible amount, or normal as compared with the May average for 18 years. The average at Elkins was 55 per cent, or normal as compared with the May average for 16 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 6th, 8th, and 24th; Creston, 6th and 24th; Davis, 4th: Elkins, 1st, 24th, and 25th; Grafton, 1st, 3d, 4th, 5th, 6th, 9th, 10th, 11th, 12th, 20th, 21st, 24th, 25th, 26th, 27th, 29th, and 31st; Mannington, 6th, 8th, 24th, 25th, 26th, 27th, and 29th; Martinsburg, 15th; New Cumberland, 20th; Romney, 14th and 15th; Rowlesburg, 8th and 24th; Williamson, 5th, 18th, and 25th.

Hail: Bayard, 16th; Burlington, 26th; Charleston, 8th; Evans, 27th; Glenville, 28th; Holcomb, 8th; Lost Creek, 8th; Marlinton, 8th, 16th, 26th, and 28th; Nuttallburg, 16th and 27th; Parkersburg, 28th; Pickens, 26th; Romney, 26th; Smithfield, 8th.

Halos, lunar: Bayard, 10th; Ryan, 19th.

Halos, solar: Elkins, 10th; Pickens, 12th and 13th; Romney, 12th.

Haze: Bayard, 9th, 12th, and 24th.

Thunderstorms (dates and number of stations reporting): 3d, 1; 5th, 4; 6th, 3; 7th, 7; 8th, 13; 9th, 2; 14th, 4; 15th, 5; 16th, 11; 17th, 4; 23d, 1; 24th, 2; 25th, 9; 26th, 8; 27th, 8; 28th, 18; 29th, 11; 30th, 5.

COMPARATIVE DATA FOR MAY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	57.2	..	..	3.18	....	....	....	..	..	..
1892	62.2	96	32	5.04	....	....	....	..	..	..
1893	59.5	92	30	4.51	6.41	1.83	....	12	9	10
1894	62.1	100	28	4.44	9.40	2.17	....	16	9	6
1895	61.6	100	20	2.60	6.31	0.79	....	12	11	8
1896	68.3	95	33	3.01	5.92	0.65	....	11	13	7
1897	57.6	90	23	4.60	7.66	2.17	....	13	10	8
1898	63.0	94	28	4.51	6.15	2.76	....	13	10	8
1899	64.1	96	35	5.17	7.68	3.17	....	11	14	6
1900	62.5	98	21	2.99	6.75	0.35	....	14	9	8
1901	64.8	96	21	6.15	8.88	2.50	....	11	10	10
1902	65.2	98	25	3.17	6.09	1.30	....	14	11	6
1903	64.3	95	20	3.03	6.24	0.80	0	18	9	4
1904	61.8	98	25	3.55	5.80	1.54	T	12	11	8
1905	64.2	96	26	4.95	7.96	1.96	0	12	10	9
1906	62.7	98	22	2.59	6.89	0.39	T.	15	9	7
1907	59.0	93	24	3.88	6.37	1.38	0	12	10	9
1908	63.4	96	28	6.19	11.45	2.73	0.1	9	12	10
1909	60.8	93	21	3.82	6.05	1.80	0.1	14	9	8
1910	57.9	96	19	3.92	5.87	1.55	0	11	10	10
1911	66.0	100	22	1.46	6.35	0.03	0	20	8	3
1912	63.3	94	31	3.93	7.50	1.16	0	15	8	8
1913	61.6	95	19	5.16	8.86	1.89	....	14	8	9
1914	62.4	100	24	1.96	3.75	0.55	....	18	8	5
1915	61.1	92	29	4.22	6.85	2.56	....	10	9	12
1916	64.0	97	28	3.58	6.00	0.90	T.	14	9	8
Means and Extremes	62.2	105	19	3.91	11.45	0.03	T.	13	10	8

Climatological Data for May, 1916.

Stations.	Counties.	Elevation. Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.					Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	
Panhandle Division.																				
Bayard	Grant	2,700	14	60.0	+2.9	82	27	34	19	40	4.60	+0.28	1.41	T.	16	6	11	14	w.	G. C. Dixon.
Burlington	Mineral	875	22	63.6	+2.1	90	28	35	19†	42	2.31	−1.56	0.70	0.0	7	7	23	1	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27	.....	.....	.....	.....	.....	.....	.....	3.36	−0.37	0.79	0.0	8	.....	.....	.....	w.	S. W. Lightner.
Lost City	Hardy	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. D. Hinegardner.
Martinsburg	Berkeley	435	24	65.9	+2.7	92	28	40	19	42	3.16	−0.61	1.38	0.0	8	22	5	4	s	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	.....	.....	97[b]	28	37[b]	19	....	1.83	−1.88	0.46	0.0	10	.....	.....	.....	.....	M. S. Henkel.
Piedmont	Mineral	919	0	63.1	.....	88	27	34	19	40	2.08	.....	0.69	0.0	11	12	9	10	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	19	66.6	+4.2	91	28	40	10†	43	3.01	−0.69	1.02	0.0	9	7	21	3	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	63.2	+1.4	85	8	34	19	38	1.05	−2.38	0.50	0.0	5	26	4	1	w.	J. M. Mallow.
Averages and	Extremes	.....	.....	63.7	+2.7	97	28	34	19	43	2.68	−1.03	1.41	T.	9	13	12	6	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	64.9	+1.4	90	14	38	19	39	4.07	−0.41	1.24	0.0	12	18	8	5	.....	J. D. Riggs.
Brandonville	Preston	1,809	6	.....	.....	.....	.....	.....	.....	.....	4.16	.....	1.57	0.0	13	.....	.....	.....	.....	W. T. Miller.
Buckhannon	Upshur	1,411	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. A. Darnall,
Cairo	Ritchie	674	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Van A. Zevely.
Central Station[g]	Doddridge	950	19	63.7	+1.9	91	14	29	19	46	4.21	−0.75	.....	0.0	13	5	7	12	w.	D. H. Doak.
Cheat Bridge	Randolph	3,600	4	.....	.....	.....	.....	.....	.....	.....	4.74	.....	0.72	0.0	10	.....	.....	.....	.....	Walter Cole.
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	3.35	.....	0.75	0.0	7	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	15	65.6	+2.1	92	14†	35	19	45	4.86	+1.39	1.10	0.0	13	14	10	7	sw.	J. M. Reed.
Davis	Tucker	3,093	8	.....	.....	.....	.....	.....	.....	.....	3.83	.....	0.75	T.	15	14	5	12	sw.	Ross C. Male.
Elizabeth	Wirt	646	5	.....	.....	.....	.....	.....	.....	.....	4.73	.....	1.50	0.0	8	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,940	16	62.4	+3.3	87	14	34	19	43	4.29	+0.31	0.80	0.0	18	4	10	17	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	65.3	+2.8	93	14†	35	19	42	3.43	−0.59	0.88	0.0	14	22	0	9	w.	F. P. Hall.
Glenville	Gilmer	738	23	64.4	+1.0	96	14†	33	20	52	3.46	−0.51	0.80	0.0	11	13	9	9	s.	M. T. Brannon.
Grafton	Taylor	1,000	24	66.0	+3.8	94	28	33	19	44	5.82	+1.52	2.17	0.0	11	18	7	6	w	Joseph Gerken.
Lost Creek	Harrison	1,026	19	64.6	+3.5	91	15	31	19	45	4.61	+0.52	1.18	0.0	12	16	9	6	w.	Allen Smith.
Mannington	Marion	974	14	65.2	+1.9	88	14	31	19	42	4.03	+0.10	0.90	0.0	17	11	9	11	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	64.7	+2.1	95	14	37	19	38	3.00	−0.69	0.69	0.0	17	18	6	7	s.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	14	65.4	+2.2	93	14	40	19†	44	3.87	+0.87	0.95	0.0	13	17	5	9	sw.	M. Z. White.
New Cumberland	Hancock	987	19	61.2	+0.3	85	24	34	19†	44	2.74	−0.45	1.09	0.0	13	9	19	3	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	65.2	+1.9	92	14	35	19	42	4.08	+0.49	1.18	0.0	12	15	9	7	s.	Wm. Ankrom.
Parkersburg	Wood	638	28	65.9	+2.6	91	26	38	19	37	4.65	+1.19	1.48	0.0	15	12	10	9	nw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	61.9	+2.7	87	13	31	19	45	3.58	−0.34	1.16	0.0	7	10	13	8	.....	J. W. Swisher.
Philippi	Barbour	1,149	20	65.8	+3.9	88	15	40	18	38	2.56	−1.67	0.86	0.0	9	12	15	4	.....	Okey J. Robinson.
Pickens	Randolph	2,697	14	62.4	+3.5	87	14†	30	19	46	4.95	−0.05	1.07	T	13	18[a]	5[a]	7[a]	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30	.....	.....	.....	.....	.....	.....	.....	4.16	−0.12	1.06	0.0	10	.....	.....	.....	.....	J. F. Pierce.
Saint Marys	Pleasants	577	8	.....	.....	.....	.....	.....	.....	.....	5.10	.....	1.66	.....	12	.....	.....	.....	w.	Wm. Hughes.
Smithfield	Wetzel	835	11	64.0	+2.7	91	14	33	19	44	4.50	+0.60	1.13	0.0	15	18	9	4	nw.	G. M. Whisler.
Terra Alta	Preston	2,612	16	60.8	+1.3	80	16	34	19	26	5.46	+0.46	1.08	0.0	7	19	6	6	e.	C. F. Dodge.
Wellsburg	Brooke	1,225	16	61.7	+0.9	83	26	36	19	33	3.25	−0.22	0.75	0.0	13	10	16	5	nw.	C. P. Waugh
Weston	Lewis	1,026	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss C. M. Davis,
Wheeling	Ohio	645	30	65.6	.....	93	24†	36	19	42	3.13	−0.34	0.69	0.0	13	15	10	6	s.	Miss M. B. Forsyth.
Averages and	Extremes	.....	.....	64.0	+2.3	96	14†	29	19	52	4.09	+0.15	2.17	T.	12	14	9	8	w.	
Southern Division.																				
Bancroft	Putnam	574	12	65.0	+3.2	90	14†	38	19	45	3.28	−0.79	0.93	0.0	11	21	0	9	ne.	R. E. Dent.
Beckley	Raleigh	2,440	16	62.8	+3.0	85	15†	29	19	42	3.85	+0.69	1.34	0.0	6	21	4	6	w.	John A. Ewart.
Bluefield[b]	Mercer	2,558	21	64.6	+2.2	86	26†	36	19	37	0.90	−2.96	0.39	0.0	3	20	4	3	.....	Norfolk & Western Ry.
Charleston	Kanawha	597	13	70.0	+4.0	94	14†	38	19	54	4.54	+0.69	0.87	0.0	13	13	4	14	w.	C. V. Lewis.
Clay	Clay	706	0	.....	.....	.....	.....	.....	.....	.....	2.05	.....	0.65	0.0	6	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba [hr]	Jackson	650	14	68.4	+5.6	92	26	33	19	40	3.29	−0.11	0.84	0.0	11	6	22	3	w.	C. T. Perry.
Dam 22 O. R.	Jackson	538	...	.....	.....	.....	.....	.....	.....	.....	3.27	.....	0.69	0.0	9	.....	.....	.....	w.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	...	.....	.....	.....	.....	.....	.....	.....	4.24	.....	1.16	0.0	10	.....	.....	.....	nw.	U. S. Engineer Office.
Dunlow	Wayne	703	8	69.2	.....	87	17†	49	8	51	2.15	.....	.....	0.0	7	19	0	12	.....	James W. Damron.
Elkhorn	McDowell	1,933	23	66.8	+4.1	89	26†	36	20	41	1.55	−2.62	0.26	0.0	8	16	15	0	w.	J. J. Lincoln.
Evans	Jackson	606	0	.....	.....	.....	.....	.....	.....	.....	3.14	.....	1.55	0.0	15	14	5	12	.....	B. F. Sayre.
Green Sulphur Spgs	Summers	1,600	20	63.6	+1.9	90	8	30	18	50	3.10	−0.82	0.93	0.0	8	11	13	7	n.	W. H. Gwinn.
Hinton	do	1,450	19	66.6	+1.3	92	28	36	19	40	2.50	−1.34	1.34	0.0	11	19	3	9	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	61.8	.....	89	15	30	19	49	3.75	.....	1.26	0.0	13	18	4	9	.....	R. E. Ferguson.
Huntington	Cabell	538	20	67.2	+2.4	93	26	38	19	42	4.40	+0.47	1.14	0.0	14	8	2	11	w.	L. H. Hutchinson.
Lewisburg	Greenbrier	2,200	16	62.7	+1.9	87	28	32	19	45	2.45	−1.35	1.04	0.0	7	17	8	6	sw.	Geo. T. Argabrite.
Logan	Logan	687	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Oliver, Jr.
Madison	Boone	704	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	15	58.1	−0.7	82	27	28	19	42	5.72	−0.18	1.10	0.0	11	1	27	3	sw.	S. L. Brown.
Nuttallburg [d]	Fayette	2,252	23	59.1	.....	84	25	33	29	37	6.00	+2.49	1.20	0.0	10	14	9	4	.....	Miss Donna Fully.
Point Pleasant	Mason	553	23	66.0	+0.5	93	26	35	19	46	4.24	+0.49	1.49	0.0	11	9	9	13	sw.	W. D. Holmes.
Powellton	Fayette	933	20	.....	.....	.....	.....	.....	.....	.....	2.66	−1.28	.....	.....	.....	.....	.....	.....	.....	S. C. Lampert.
Renick	Greenbrier	1,653	0	.....	.....	.....	.....	.....	.....	.....	3.06	.....	1.70	0.0	5	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	16	66.6	+2.5	94	14	43	5†	45	4.34	+0.83	1.17	0.0	12	18	1	12	n.	E. C. Brace, Jr.
Ryan	Roane	700	13	64.1	+1.6	91	14	30	19	45	3.16	−0.37	0.78	0.0	13	12	11	8	.....	Wm. E. Ryan.
Spencer	do	784	12	65.8	+3.7	93	15†	31	18	48	2.69	−0.96	0.70	0.0	7	9	20	2	.....	A. M. McKown.
Sutton	Braxton	839	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ben Gillespie.
Union	Monroe	2,250	12	63.0[e]	+2.0	88[a]	28	33	19	47	2.69	−0.50	1.10	0.0	6	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	62.6	....	87	26	34	20	44	2.47	.....	0.96	0.0	11	24	2	5	w.	J. M. Ayres.
Williamson	Mingo	660	16	67.8	+1.9	93	14	41	19	44	2.32	1.59	0.66	0.0	11	17	7	7	w.	J. F. Keyser.
Averages and	Extremes	....	....	64.2	+1.8	94	14†	28	19	51	3.22	−0.48	1.70	0.0	10	16	7	8	w.	
State Averages and	Extremes	.....	.....	64.0	+2.2	97	28	28	19	52	3.55	−0.28	2.17	T.	11	15	9	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. [hr] Received too late to be included in means and summaries.

Daily Precipitation for May, 1916.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
...yard	Potomac	.04		.35		.15	.61	.37	.03		.06				.14		1.41	.07					.11	.35			.06	T.	.45	.05	.35		4.60
...rlington	do.	T.		.10			.43				T.				*		.43	T.					.45				.20		T.	.70			2.31
...rpers Ferry	do.			.20	.36			.22										.79					.60							.60	.34	.25	3.36
...st City	do.																																
...artinsburg	do.			.17				.28									.60						*	.67					.06	*	1.38		3.16
...ooreield	do.	.06						.46		.05							.31						.30		.02			.03	.05	.30	.25		1.83
...dmont	do.				T.			.33	T.			.04					.15	.03	.06				.16	.69	.18		.02		.27		.15		2.08
...nney	do.	.06	.13	.07			.38	T.						T.			1.02							.42			.13			.30	.50		3.01
...per Tract	do.	T.		.10	.50	T.	.15										T.									T.			.20	.10	T.		1.05
Northern Division.																																	
...ns Run	Ohio	.16	.20	.20			1.24	.20									.10						.11	.33			.18	.12	.98		.25		4.07
...audonville	Monongahela		.10	.30		.04	.32	.30		.04	.10						1.57							.40			.07			.41	.34	.17	4.16
...ckhannon	do.																																
...iro	Little Kanawha																																
...ntral Station	Middle Is. Creek	.15	.05		.87	*	1.20	.04									.34						.19	.04		.03	.31		.90	.09			4.21
...eat Bridge					.62			.45										.52	.32					.50	.55		.60		.22	.72	.24		4.74
...rtland	Monongahela			.70		.14	.63											.60						.75							.45	.08		3.35
...reston	Little Kanawha		.32	.73		.28	.72	T.	.18		.02							.16	.05				T	.39					.02	1.70	.42	.47		4.86
...avis	Monongahela			.33		.11	.75		.29		.16		T.		.20	.13	.58	.05						.58			.08	T.	.12	.14	.16	.15		3.83
...lizabeth	Little Kanawha		.39	.72			1.50		.20									.12						.27						1.24		.29		4.73
...kins***	Monongahela	.11	.28	.05	.02		.49	.41				.11			.24		.37	.17	.04		T		.23	.39		.04	.14		.24	.72	.24			4.29
...irmont	do.		.12	.32		T.	.88		.36			.07			.02		.30	T					.01	.28			.03	.01	T.	.64	.22	.17		4.43
...lenville	Little Kanawha		.35	.30		.21	.80											.20	.18				T.	.12			.12			.80	.18	.20		3.46
...afton	Monongahela	.12					1.28	.08			.08						.82						.08	.38			.38	1.62	.55	.63	.40			5.82
...st Creek	do.	.06	T	.30		.10	1.00	.05			.08						T.	T.					.02	.30			T.	.70		.98	.20	.82			4.61
...ammington	do.	.11	.04	.45			.90	.23			.07				.13	.13	.01	T.					.21	.22		.06	.17	.25	.40	.26	.41			4.03
...organtown	do.	.10	.02	.30		.03	.69	.09			.06				.04	.22	.06	.02					.09	.11			.01	.56	.16	.51			3.00
...oundsville	Ohio	.13		.65		.08	.95				.07			.10		.09							.08				.33	.15	.43	.38	.43			3.87
...ew Cumberland	do.	.07	.35	.03		.09	.16				.15				.07	.99	.10	T.					.37				T.		T.	.12	.06	.18			2.74
...ew Martinsville	do.	.15	.18	.28			1.18				.05												.25	.05			.27	.10	.22	.28	1.07			4.08
...arkersburg*	Ohio	.13	.69		.15	.87	1.11	.03			.03	T					.17	.01			T.		.20	.08		T		.07	1.14	.28	.21			4.65
...arsons	Monongahela	.14	T.	T.	1.16			.16				T.		T.				T.				.73	.48			T.			.18	.73				3.58
...hilippi	do.	.15				.30	.86	.25									.30						.05				.20		.23		.22			2.56
...ickens	do.		T.	T.	.62			.41	.39			T			T		.42	.07	.05				.11	.36		.27	.75	.11	.32		1.07			4.95
...owlesburg	do.		.10	.34		T.	.84		.48		.10						.50							.36						1.66	.20	.18		4.16
...int Marys	Ohio		.22	.65	T.	.12	1.23	T.	.06		.03							.06						.33			.26			1.66	.29	.19		5.10
...mithfield	Fishing Creek	.03	.25	.59			1.15		.20		.12		T.		.06	.21	.06	T		T.		T.	.55			.22		.28	.69	.16	.15		4.50
...erra Alta	Monongahela							.22		.41	.12					T.	1.06	T					.92	1.05	T.					1.68			5.46
...ellsburg	Ohio	.02	.40	.03				.50			.07				.45	.15	.05						.31			.05		.02	.45		.75			3.25
...eston	Monongahela																																
...heeling	Ohio			.08	.27		.08	.69			.11	T.	T.		.22		.01	T.	T.				T.	.18			.03		.05	.43	.60	.38		3.13
Southern Division.																																	
...ancroft	Great Kanawha			.14	.93		.08	.33		.35								.12	.05					.48					.31	.22	.24			3.28
...eckley	do.	.10						.36	.16														1.13					.76		1.34				3.85
...luefield	do.			.30														.30						.25										0.90
...harleston	do.			.10	.75	.10	.37	.30		.34	T							.42	.36				.40	.44						.12	.75	.10		4.54
...ay	do.			T	.65			.30			.25													.55					.20	.30				2.05
...uba	Sand Creek	.16	.05	.41				.84				T.					.07	T.	.02	T			.22					.17	.15	.64	.56			3.29
...am 22 O. R.	Ohio		.24	.52		.18	.60											.46					T.	.27						.69	.43	.21		3.27
...am 26 O. R.	do		.17	.74				.95										.10	.10					.46					.23	1.16	.31	.41		4.24
...unlow	Big Sandy		.12		.27											.07								.50					*	*	1.17			2.13
...ilkhorn	do.			.16			.24					T.					.16						.24	.16					.33	.21	.26			1.53
...vans	Ohio	.20	.41	.74	T.	.13	.53		.01	.02							.12		.16				.34	.05			.06	1.55	.25	.59	T.			5.14
...reen Sulphur Spgs.	Great Kanawha						.35		.15								.25	.15					.42	.93					.26		.65			3.10
...linton	do.			.04	T.	.04		.24	.28			.04					.22	.04						1.34	.06					T.	.18	.02		2.50
...olcomb	do.	.10		.75	.10		.28	.12			T.							.28	.15					.56			.08	.13		1.26				3.75
...untington	Ohio		.14	1.14			.06	.70	.06	.10							T.	.22	.06				.08	1.06				.06	.22	.42	.08			4.10
...ewisburg	Great Kanawha		T.				.08	.14				T					.50	T.	.14				.34	1.04	T.			T.		T.	.20			2.13
...ogan	Guyandotte																																
...adison																																	
...arlinton	Great Kanawha		T.	.08	T.	.02	.08	.10			T.						.17	.15					.90	.33			1.10		.34		.15			3.72
...uttallburg	do.						1.20	.60									.30	.55					.60	.10			.70	.75	.80	.40			6.00
...oint Pleasant	Ohio		.19	.38		.17	.75										.06	.04						.40					.32	1.43	.06	.14		4.24
...owellton	Great Kanawha		.37																				1.55								.76			2.68
...enick	do.																						1.70	.05	.20						.90			3.06
...obertsburg	do.		.12	.77		.10	.55											.18	.07				.08	.52					.22	1.13	.55	.30		4.34
...yan	do.		.05	.78	.09	.11	.35	T			.06						.22		.08				.36					.01	.18	.51	.36			3.16
...pencer	Little Kanawha		.20		.05	.55																		.70						.60		.20	.35	2.65
...utton	Great Kanawha																																
...nion	do.				.20		T.		.10			T.					.40						1.10	.10								.15	2.05
...hite Sulphur Spgs	do.				.06		.14				.02						.06	.19	.17				.29	.96			.25				.35	.02		2.47
...illiamson	Big Sandy				.12		.16	.03	.14									.08	T.				.12	.66	.06					.27	.48	.20		2.32

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

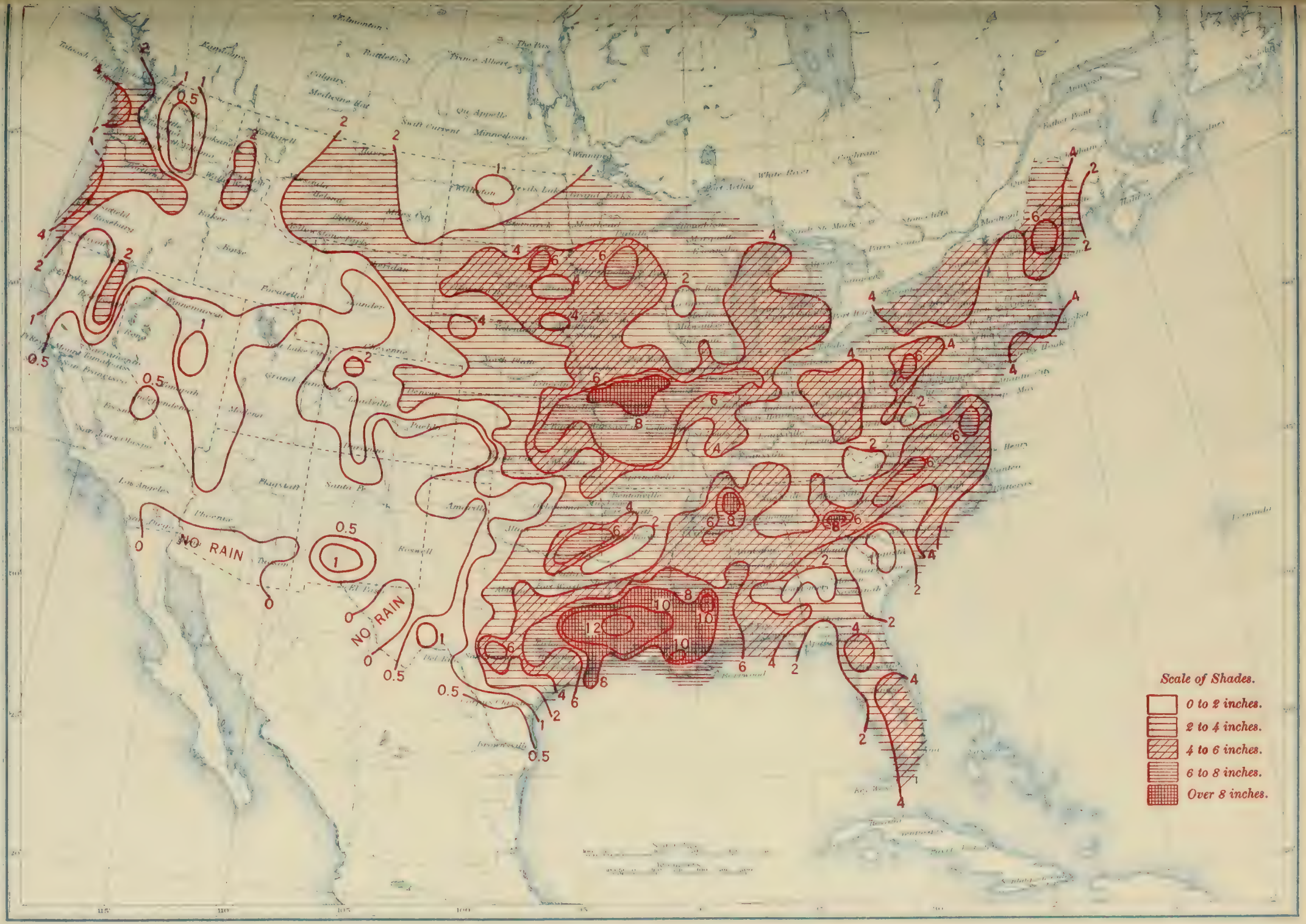
††† Probably incomplete.

Daily Temperatures for May, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Division.																																	
Bayard	Maximum	75	67	71	68	66	71	76	76	64	77	72	68	68	76	80	71	53	53	64	68	71	66	75	76	77	80	82	81	73	68	68	71.0
	Minimum	35	53	57	42	46	58	57	50	48	38	52	44	42	43	58	52	39	40	34	38	44	50	55	55	50	60	58	58	54	56	50	48.9
Burlington	Maximum	83	74	74	70	74	79	74	85	74	80	80	75	68	80	87	78	64	67	64	72	71	68	70	74	85	83	89	90	80	73	73	76.1
	Minimum	41	50	53	52	48	49	54	49	54	40	56	53	51	44	57	54	48	49	35	35	49	46	55	60	54	61	59	61	56	60	54	51.2
Martinsburg§	Maximum	87	78	79	73	78	82	78	89	73	79	80	75	71	78	88	80	63	66	73	75	74	72	67	75	89	86	89	92	84	72	74	78.0
	Minimum	45	55	58	56	55	57	57	54	59	44	48	56	54	50	54	58	54	47	40	45	50	49	50	52	55	57	62	63	63	63	59	53.8
Piedmont	Maximum	83	76	75	70	75	78	73	83	73	78	76	73	73	79	87	77	61	63	73	68	76	56	68	71	81	83	88	85	80	68	74	75.3
	Minimum	43	48	53	49	49	50	55	49	54	41	56	50	52	45	58	56	47	43	34	40	47	48	53	58	52	60	59	59	56	60	54	50.9
Romney	Maximum	87	85	74	70	80	81	84	90	78	83	82	80	84	89	88	80	67	67	70	72	72	69	72	77	87	85	90	91	82	75	78	79.6
	Minimum	45	55	55	51	50	56	55	50	58	40	60	55	50	60	52	56	50	48	40	43	50	52	54	60	57	63	60	61	56	65	56	53.6
Upper Tract	Maximum	84	70	81	73	74	79	74	85	79	78	79	77	72	77	80	82	66	65	70	69	74	69	73	74	78	83	80	80	82	74	71	75.9
	Minimum	46	52	51	53	49	50	54	48	55	40	62	53	50	45	54	51	49	45	34	44	45	49	52	58	49	60	55	55	53	58	50	50.6
Northern Division.																																	
Bens Run	Maximum	81	72	73	65	74	79	76	82	72	82	79	69	80	90	83	76	64	64	72	65	78	69	83	85	86	89	88	83	76	76	74	76.9
	Minimum	45	55	52	45	50	49	58	54	53	45	57	48	52	51	60	55	47	45	38	42	46	57	60	57	60	64	63	62	59	59	51	52.9
Buckhannon	Maximum																																
	Minimum																																
Creston	Maximum	83	76	73	65	76	81	78	86	75	87	80	76	83	92	92	78	67	69	74	71	79	70	82	87	87	91	91	91	76	74	75	79.5
	Minimum	43	52	53	49	48	49	58	52	47	42	58	49	49	50	60	57	47	43	35	42	43	55	60	58	53	61	61	60	57	62	50	51.7
Elkins	Maximum	81	68	77	66	72	76	71	82	68	82	78	72	78	87	86	78	58	60	68	64	75	65	77	82	81	85	86	86	78	66	68	74.9
	Minimum	41	52	51	46	51	54	53	47	46	39	53	48	54	49	62	50	44	44	34	39	43	55	55	57	51	61	60	60	54	55	47	49.9
Fairmont§	Maximum	82	61	75	69	75	79	76	84	73	85	76	72	82	93	93	82	62	65	73	72	76	75	84	88	85	92	90	87	80	67	74	78.3
	Minimum	43	52	52	46	45	47	51	51	50	46	53	47	55	51	60	61	47	44	35	43	49	58	60	59	55	61	63	63	58	61	55	52.3
Glenville	Maximum	85	85	77	75	77	83	83	87	81	89	90	78	85	96	95	94	66	67	76	75	84	83	88	91	89	93	96	90	80	80	77	83.7
	Minimum	35	44	46	41	40	43	50	45	43	41	52	40	43	44	50	51	40	36	35	33	35	48	52	51	47	54	55	54	51	54	45	45.1
Grafton	Maximum	83	79	75	74	74	81	78	85	90	86	80	81	92	91	89	68	65	72	73	69	80	74	81	88	82	89	90	94	79	75	73	80.3
	Minimum	42	50	56	47	47	51	55	50	53	42	59	46	50	58	59	46	46	34	33	41	45	58	60	58	54	63	62	65	57	60	55	51.7
Lost Creek	Maximum	82	74	72	69	74	77	75	84	80	85	80	82	84	89	91	89	64	64	71	69	75	70	80	84	84	88	85	86	77	71	71	78.3
	Minimum	42	45	49	47	46	46	55	54	49	40	56	49	52	53	58	57	46	44	31	39	44	56	59	56	51	61	61	61	55	63	54	50.9
Mannington	Maximum	80	78	72	71	72	76	74	83	73	82	82	71	77	88	85	82	61	64	69	68	72	71	77	84	82	86	85	83	77	74	69	76.4
	Minimum	40	54	51	46	43	46	56	49	48	40	57	42	50	48	56	58	46	40	31	39	44	52	59	56	51	60	60	60	55	62	48	49.9
Morgantown	Maximum	79	68	73	68	71	70	72	81	72	82	83	68	84	95	88	80	60	60	70	68	74	74	82	84	81	81	86	84	78	72	69	76.0
	Minimum	55	50	52	44	50	57	55	57	52	47	57	48	53	57	64	58	45	43	37	41	47	57	58	58	55	61	64	62	57	61	52	53.4
New Cumberland	Maximum	83	75	69	65	76	76	78	84	69	83	81	67	70	73	84	74	62	55	70	66	70	67	81	85	82	83	82	78	74	74	68	74.3
	Minimum	43	44	49	39	43	43	55	50	52	39	52	42	46	49	59	53	42	40	34	34	35	51	60	54	50	52	57	61	60	60	47	48.2
New Martinsville	Maximum	81	71	72	66	74	78	78	82	75	86	82	70	78	92	89	80	66	66	72	69	78	76	82	86	85	90	86	82	76	73	75	77.9
	Minimum	45	54	52	45	48	50	58	54	50	44	58	46	52	51	61	57	47	42	35	42	46	56	61	59	54	64	63	62	58	61	51	52.5
Parkersburg	Maximum	82	69	73	64	75	79	79	83	71	86	78	68	75	89	86	73	64	63	71	64	74	70	80	84	84	91	89	85	76	70	71	76.3
	Minimum	52	54	50	48	53	50	60	60	54	49	59	54	54	55	68	55	48	46	38	49	51	63	62	59	58	64	67	63	61	62	54	55.5
Parsons	Maximum	74	70	75	66	71	73	72	81	68	81	76	70	87	85	80	86	60	61	69	65	78	70	80	83	81	84	83	83	84	65	68	75.1
	Minimum	34	42	49	48	47	49	52	49	44	36	55	39	47	46	55	54	45	44	31	35	41	57	56	57	49	60	60	61	62	56	50	48.7
Philippi	Maximum	81	74	75	75	74	72	73	85	75	84	80	70	78	87	88	81	63	64	72	69	76	77	80	86	85	87	87	83	79	67	70	77.3
	Minimum	52	54	53	45	52	51	59	55	57	46	58	49	56	52	64	56	45	40	42	58	46	61	58	56	54	61	65	64	56	61	53	54.2
Pickens	Maximum	80	67	74	70	75	84	75	83	75	78	77	75	85	87	87	72	65	61	76	65	80	63	71	81	86	83	86	87	77	63	72	76.1
	Minimum	45	48	51	47	41	46	52	47	46	40	52	40	51	53	59	48	40	39	30	38	42	55	55	55	51	56	60	58	55	55	51	48.6
Terra Alta	Maximum	72	70	68	68	65	66	70	70	65	68	66	64	68	71	77	80	72	60	60	62	71	66	68	71	75	71	74	76	74	72	74	69.5
	Minimum	52	50	50	53	46	46	52	51	48	48	46	47	48	50	54	60	48	39	34	40	53	45	48	60	64	62	63	64	66	61	63	52.0
Wellsburg	Maximum	76	69	66	63	69	73	74	79	68	79	75	63	71	78	81	73	58	56	65	64	70	66	79	81	79	83	82	77	72	68	67	71.7
	Minimum	49	46	51	43	48	49	56	56	51	46	55	46	48	52	62	58	43	42	36	40	46	54	60	59	56	57	63	62	60	60	49	51.7
Weston§	Maximum																																
	Minimum																																
Wheeling§	Maximum	82	61	72	70	77	84	79	86	77	84	78	72	81	92	91	83	64	64	77	72	78	68	87	93	88	93	89	81	72	72	77	78.8
	Minimum	40	52	50	40	48	49	53	56	50	59	57	47	53	53	58	55	45	42	36	40	44	56	62	59	55	61	63	64	61	62	51	52.3
Southern Division.																																	
Beckley	Maximum	77	73	74	70	78	78	79	81	80	79	84	82	80	84	83	84	85	80	69	81	80	78	80	79	81	85	84	81	80	81	80	79.7
	Minimum	46	44	41	40	52	47	49	51	41	39	42	44	40	44	42	45	45	40	29	47	45	41	47	48	47	57	55	54	50	54	54	45.8
Bluefield	Maximum	77	76	75	70	71	76	75	80	77	82	79	80	80	83	....	82	69	63	69	75	.....	77	64	78	82	86	86	85	84	77	73	76.5
	Minimum	40	55	55	53	48	53	57	54	53	47	60	49	57	60	....	57	45	45	36	43	.....	49	55	57	53	58	60	59	57	58	54	52.7
Charleston	Maximum	85	83	83	79	80	82	83	89	87	90	86	85	89	94	92	90	89	89	89	85	88	87	83	85	89	94	91	93	90	88	80	87.0
	Minimum	46	53	51	50	51	51	52	56	51	45	55	52	53	51	56	61	47	46	38	39	49	48	61	62	56	60	65	64	57	55	55	52.9
Elkhorn	Maximum	80	80	76	74	75	78	79	85	85	85	85	82	83	84	86	86	64	65	71	77	80	80	67	81	84	89	89	89	82	80	72	79.8
	Minimum	47	53	55	57	49	51	55	55	58	49	61	47	54	59	61	59	48	45	37	36	50	52	59	59	55	58	63	60	59	62	56	53.8
Green Sulphur Spgs.	Maximum	74	88	80	73	89	78	84	90	80	84	85	81	85	84	88	81	71	73	77	82	80	72	70	83	86	89	89	89	81	70	71	80.9
	Minimum	42	38	45	53	49	42	48	47	46	34	37	39	44	45	52	54	41	30	36	47	45	44	53	57	50	54	56	51	51	56	48	46.4
Hinton§	Maximum	83	77	80	74	78	83	79	88	76	85	74	85	85	85	86	85	65	68	74	78	79	65	68	82	86	90	91	92	85	75	71	79.7
	Minimum	43	46	50	55	48	54	50	55	54	53	54	45	50	54	54	57	45	41	36	41	45	55	55	58	55	57	60	59	58	60	52	51.6
Holcomb§	Maximum	82	71	78	68	72	76	78	84	72	82	74	79	78	86	89	79	61	64	72	73	80	62	76	82	84	88	85	88	80	66	70	76.7
	Minimum	46	42	47	50	45	47	45	52	42	37	52	37	45	50	58	52	41	38	30	34	31	48	54	53	46	55	59	53	56	54	52	46.8
Huntington§	Maximum	84	70	73	66	79	84	85	86	80	89	78	71	80	92	85	70	67	70	76	76	78	74	83	83	86	93	87	86	81	72	76	79.5
	Minimum	50	59	57	50	47	49	55	59	52	47	51	52	53	55	64	60	46	46	38	50	51	51	62	61	59	60	69	66	62	63	55	54.8
Lewisburg	Maximum	77	73	78	72	71	76	76	81	76	79	71	78	86	86	84	81	78	54	69	74	77	70	66	79	81	84	81	87	80	76	68	76.7
	Minimum	46	48	48	52	42	48	48	48	52	36	56	44	46	49	54	53	44	42	32	39	44	56	54	56	50	56	58	53	54	58	50	48.7
Madison§	Maximum																																
	Minimum																																
Marlinton	Maximum	74	68	72	66	66	72	68	78	70	72	68	74	78	78	80	74	56	56	64	68	74	62	68	76	78	80	82	80	76	66	66	71.3
	Minimum	32	40	42	44	40	44	48	46	46	32	48	44	42	52	52	54	46	36	28	30	40	48	50	46	48	54	54	52	52	54	48	44.9
Point Pleasant	Maximum	83	72	75	68	77	82	82	86	79	89	85	73	81	92	89	81	67	70	75	72	76	75	81	88	89	93	92	88	78	74	75	80.1
	Minimum	48	53	51	45	46	48	56	56	49	45	57	51	48	49	59	57	44	42	33	46	42	60	60	57	54	62	63	64	57	60	48	51.9
Powellton	Maximum	85	80	84	79	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	84	84	86	88	92	91	81	71	74	83.0
	Minimum	58	52	54	51	....	....	....	....	....	....	....	....	....	....	....	....	....	....	37	....	....	....	....	52	54	57	53	59	59	56	58	54.8
Robert-burg§	Maximum	82	65	72	65	76	84	83	84	75	88	75	72	89	94	87	75	65	67	74	72	80	76	84	85	85	90	88	90	81	73	75	79.1
	Minimum	46	44	58	48	43	50	56	57	59	43	55	52	48	50	58	58	54	48	43	50	52	56	55	53	60	62	65	9	69	50	62	54.0
Ryan	Maximum	82	80	73	65	72	79	80	83	80	85	85	70	85	91	90	84	64	66	70	70	77	68	81	85	85	90	88	84	80	68	74	78.5
	Minimum	41	50	49	49	49	44	48	57	43	40	55	46	46	59	55	56	40	38	30	41	42	57	58	56	50	59	61	59	55	60	47	49.7
Spencer§	Maximum	81	69	65	78	83	83	87	77	88	79	78	84	93	87	81	76	72	76	73	78	70	81	86	88	88	89	93	90	80	75	75	80.7
	Minimum	53	50	51	40	47	57	58	47	40	58	46	47	49	58	57	44	44	31	42	41	57	59	55	50	57	61	59	55	60	57	57	50.9
Union§	Maximum	78	78	73	75	80	76	80	82	85	78	73	81	83	87	80	81	70	66	70	78	70	61	66	79	83	87	86	88	84	60	....	77.4
	Minimum	50	45	48	52	50	42	48	50	38	40	52	44	49	53	56	56	48	40	33	39	50	44	50	55	50	55	55	52	52	59	51	48.6
White Sulphur Spgs.	Maximum	82	78	80	76	76	80	77	83	81	82	76	82	83	85	85	78	69	68	69	78	70	62	67	85	86	87	85	86	83	75	74	78.3
	Minimum	37	43	46	53	40	49	47	45	50	35	54	42	44	43	51	55	45	43	42	31	43	42	53	58	50	55	52	50	52	58	47	46.9
Williamson§	Maximum	86	72	80	61	79	85	85	89	80	91	77	82	85	93	90	77	66	70	75	81	83	75	76	85	87	91	91	92	81	71	76	81.0
	Minimum	47	50	56	54	48	49	56	59	54	47	48	49	50	53	59	60	47	46	41	41	49	61	63	63	64	64	65	67	64	63	58	54.7

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, May, 1915.



WWE Stack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JUNE, 1916

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JULY 24, 1916

Departure of the Mean Temperature from the Normal, June, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

F

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXIV. PARKERSBURG, W. VA., JUNE, 1916. No. 6.

GENERAL SUMMARY.

The past month was the coolest June of record, except in 1903 and 1907, and also the wettest June, except in 1901, 1907, 1909, and 1910. The rainfall was quite favorably distributed and the temperatures were below the normal nearly all the month. After the 25th, however, the readings were seasonal and the weather was sunshiny. At the close of the month corn was more than two weeks late, but generally in good condition. Wheat, potatoes, pastures, and meadows were generally excellent. Owing to the cool, wet weather during the first decade of the month, apples and peaches were scarce in many sections.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 29.93 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.31 inches on the 22d, and 29.54 inches on the 7th. Elkins, 30.29 inches on the 22d, and 29.55 inches on the 7th.

TEMPERATURE.

The monthly mean for the State, 43 stations reporting, was 65.8°. The mean departure from the normal for 39 stations having ten or more years of record was — 3.3°. The temperature was continuously below the normal in nearly all districts until the 24th, except on the 2d, with the lowest readings occurring at most stations on the 1st. Unseasonably cool weather also prevailed on the 4th, 9-14th, and 22d-24th. In a few of the more elevated localities light frost formed on the 1st. After the 24th the daily readings were about normal.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 82 per cent; 8 p. m., 66 per cent. The June averages for the same hours for the past 27 years are 79 and 69 per cent, respectively. Elkins, 8 a. m., 86 per cent; 8 p. m., 73 per cent. The June averages for Elkins for the same hours for the past 15 years are 84 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 58 stations reporting, was 5.42 inches. The departure from the normal for 42 stations having ten or more years of record was + 0.92 inch. The rainfall was heaviest over the Monongahela basin and lightest over the western and southern counties. Rain occurred daily in nearly all localities from the 3d to the 11th, 15th to the 21st, and on the 24th and 25th, the greatest amounts being received on the 3d, 6-7th, 9-10th, 15-16th, 18-19th, and 25th.

WIND.

The average wind velocity at Parkersburg was 4.7 miles per hour, or 0.2 mile above the June average for the past 26 years. The average at Elkins was 3.2 miles per hour, or 0.1 mile below the June average for 16 years. The highest velocity at Parkersburg was 24 miles per hour from the southwest on the 8th, and at Elkins 20 miles per hour from the west on the 3d.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 51 per cent of the possible amount, or 7 per cent below the June average for 18 years. The average at Elkins was 49 per cent, or 4 per cent below the June average for 16 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 12th, 13th, 14th, 27th, 29th, and 30th; Bayard, 9th, 10th, 26th, 28th, 29th, and 30th; Elkins, 6th, 8th, 12th, 13th, 14th, 23d, 26th, and 29th; Hinton, 14th; Holcomb, 13th; Mannington, 1st, 4th, 8th, 12th, 13th, 14th, 16th, 20th, 22d, 23d, 26th, 27th, and 29th; New Cumberland, 5th, 6th, 13th, 14th, 16th, 22d, 23d, 24th, 25th, 26th, 27th, 28th, and 29th; Philippi, 13th, 14th, 23d, 27th, 28th, and 29th; Romney, 10th, 26th, 27th, 28th, and 29th; Rowlesburg, 8th, 12th, 13th, 14th, 20th, 23d, 26th, 28th, and 29th; Wellsburg, 28th.

Frost, light: Bayard and Davis, 1st, 4th, and 24th; Lewisburg, 1st.

Hail: Evans, 9th and 10th; Holcomb, 10th; Lewisburg, 17th, 19th, 24th, and 25th; Robertsburg, 6th; Wheeling, 3d and 17th.

Haze, light: Bayard, 22d.

Thunderstorms (dates and number of stations reporting): 2d, 3; 3d, 11; 4th, 1; 5th, 3; 6th, 4; 7th, 5; 8th, 11; 9th, 10; 10th, 9; 14th, 6; 15th, 1; 16th, 1; 17th, 2; 18th, 1; 19th, 2; 20th, 1; 21st, 7; 24th, 8; 25th, 2.

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	71.2	..	..	5.02	....	....	....	..	..	..
1892	74.1	99	41	3.90	....	....	....	..	..	..
1893	70.2	99	40	3.81	6.41	1.83	....	13	5	6
1894	70.4	103	32	3.27	6.78	1.25	....	16	10	4
1895	72.1	102	38	2.32	5.66	1.20	....	15	10	5
1896	69.8	95	30	5.35	9.86	0.11	....	8	14	8
1897	69.3	96	35	4.31	6.77	1.31	....	12	12	6
1898	70.9	99	41	3.21	7.56	0.66	....	14	11	5
1899	72.0	98	35	4.99	8.93	1.46	....	14	9	7
1900	71.2	98	41	5.30	15.62	2.49	....	9	12	9
1901	70.7	104	32	5.67	11.10	1.37	....	12	12	6
1902	68.0	100	33	5.19	8.49	2.45	....	11	13	6
1903	65.1	93	34	4.80	12.30	2.01	....	8	11	11
1904	69.5	97	36	4.20	8.29	2.05	....	10	13	7
1905	70.6	100	34	4.38	7.72	1.74	....	13	11	6
1906	70.9	101	38	5.25	9.32	2.84	....	11	12	7
1907	65.3	97	33	6.00	11.95	1.93	....	10	11	9
1908	69.2	98	36	5.12	6.75	1.35	....	15	10	5
1909	71.1	101	35	5.73	9.19	2.47	....	9	13	8
1910	66.6	96	32	5.67	11.27	1.52	....	10	10	10
1911	70.7	101	40	4.44	9.34	1.88	....	14	10	6
1912	67.3	95	29	4.27	9.21	1.11	....	13	10	7
1913	69.5	99	29	3.44	6.55	0.86	....	18	8	4
1914	72.0	100	30	3.00	6.60	0.62	....	15	11	4
1915	67.7	95	33	3.63	7.09	1.21	....	15	8	7
1916	65.8	94	35	5.42	14.54	2.50	....	14	8	8
Means and Extremes..	69.7	104	29	4.47	15.62	0.11	....	12	11	7

Climatological Data for June, 1916.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	60.0	−3.7	83	29	35	1	40	5.14	+0.08	1.17	0.0	14	6	10	14	w.	G. C. Dixon.
Brandywine	Pendleton		0					35	1		2.50		0.72	0.0	8	21	2	7	sw.	Elmer Keister.
Burlington	Mineral	875	22	65.0	−3.6	86	27	39	1	36	4.23	+0.17	1.00	0.0	12	8	17	5	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27								8.58	+4.85	2.00	0.0	12				e.	S. W. Lightner.
Lost City	Hardy		10																	B. D. Hinegardner.
Martinsburg	Berkeley	435	24	68.2	−2.6	91	27	43	1	35	7.04	+2.83		0.0	11	17	6	7	n.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	68.3	−1.0	94	27	42	1	40	5.37	+1.11	2.30	0.0	11	25	3	2		M. S. Henkel.
Piedmont	Mineral	919	0	63.4		84	27	40	1†	39	4.15		0.76	0.0	13	14	5	11	se.	C. A. Suter, Jr.
Romney	Hampshire	824	19	66.9	−3.1	91	27	41	1	37	3.87	+0.01	1.36	0.0	10	7	15	8		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	63.4[a]	−4.6	90[b]	27	38[a]	1	40[a]	3.73	−0.72	0.68	0.0	11	20[a]	6[a]	3[a]	w.	J. M. Mallow.
Averages and	Extremes			65.0	−3.1	94	27	35	1	40	4.96	+1.19	2.30	0.0	11	15	8	7	w.	
Northern Division.																				
Bens Run††	Pleasants	622	15	67.3	−3.1	87	27	47	1†	33	7.77	+3.21	3.00	0.0	11	18	8	4		J. D. Riggs.
Brandonville	Preston	1,809	6								6.66		1.29	0.0	13					W. T. Miller.
Buckhannon	Upshur	1,411	20	65.2	−3.6	86	27	43	1	34	5.27	+0.35	0.70	0.0	12	19	5	6		H. A. Darnall, Van A. Zevely.
Cairo	Ritchie	674	14																	
Central Station	Doddridge	950	19	63.7[d]	−6.0	87[d]	26	42[d]	1	38[d]	5.84	+1.67	1.65	0.0	10	11[b]	4[b]	13[b]	w.	D. H. Doak.
Cheat Bridge	Randolph	3,600	4								3.97		0.67	0.0	12					Walter Cole.
Cortland	Tucker	3,300	1								6.29		1.30	0.0	9					Samuel Harmon
Creston	Wirt	701	15	67.4	−3.3	91	27	45	1	36	5.32	+1.00	1.03	0.0	15	14	5	11	sw.	J. M. Reed.
Davis	Tucker	3,093	8								6.19		1.44	0.0	14	13	7	10	sw.	Ross C. Male.
Elizabeth	Wirt	646	5								4.94		1.35	0.0	12					E. D. Ball.
Elkins	Randolph	1,940	16	63.7	−2.9	87	21	40	1	40	4.86	−0.18	1.30	0.0	14	3	11	16	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	11	67.2	−3.1	89	26†	45	1	37	5.23	+0.67	1.84	0.0	16	19	5	6	w.	F. P. Hall.
Glenville	Gilmer	738	23	68.4	−2.2	90	26†	41	9	40	4.50	+0.16	0.93	0.0	10	12	10	8	s.	M. T. Brannon.
Grafton	Taylor	1,000	24																	Joseph Gerken.
Lost Creek	Harrison	1,026	19	65.4	−2.4	87	26	42	1	37	4.24	+0.32	1.74	0.0	11	17	7	6	w.	Allen Smith.
Mannington	Marion	974	14	64.0	−4.4	85	27	40	1	37	6.44	+2.59	1.24	0.0	15	11	8	11	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	66.0	−3.0	88	2	44	1	36	6.51	+1.96		0.0	14	15	3	12	s.	Prof. Edgar L. Andrews
Moundsville ††	Marshall	642	14	66.8	−3.1	89	29	42	4	38	3.37	−0.16	.94	0.0	11	16	5	9	sw.	M. Z. White.
New Cumberland	Hancock	987	19	62.4	−5.8	85	29	35	1	41	4.54	−0.14	1.58	0.0	12	10	15	5	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	67.2	−4.4	88	26†	44	1	35	7.14	+3.29	1.85	0.0	11	16	4	10	s.	Wm. Ankrom.
Parkersburg	Wood	638	28	67.6	−4.0	86	29	48	4	29	3.30	−1.35	1.15	0.0	15	10	10	10	n.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	62.8	−3.6	85	23	39	1	41	5.78	+0.21	2.15	0.0	7	15	7	8		J. W. Swisher.
Philippi	Barbour	1,149	20	66.8	−1.7	88	27†	42	1	37	4.79	+0.30	0.74	0.0	13	7	19	4	w.	Okey J. Robinson.
Pickens ††	Randolph	2,697	14	61.6[a]	+3.7	82[a]	2†	39[a]	1	38[a]	5.31	−0.85	1.37	0.0	15	17	8	5	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30								6.10	+1.23	1.80	0.0	11				e.	J. F. Pierce.
Saint Marys	Pleasants	577	8								5.27		1.40	0.0	13				nw.	Wm. Hughes.
Smithfield	Wetzel	835	11	65.4	−2.8	87	25	43	1	41	7.56	+3.18	1.46	0.0	15	19	4	7	nw.	G. M. Whisler.
Terra Alta	Preston	2,612	16	60.2	−6.3	76	2	38	1	36	14.54	+7.25	2.08	0.0	15	12	5	13	w.	C. F. Dodge.
Wellsburg	Brooke	1,225	16	65.4	−4.1	81	24†	43	1	27	4.19	−0.28	1.30	0.0	12	10	12	8	w.	C. P. Waugh.
Weston	Lewis	1,026	21																	Miss C. M. Davis, Miss M. B. Forsyth.
Wheeling	Ohio	645	30	67.6		93	29	44	1†	45	4.66	+0.79	1.38	0.0	17	14	6	10	n.	
Averages and	Extremes			65.2	−3.7	93	29	35	1	45	5.77	+1.21	2.15	0.0	13	13	8	9	w.	
Southern Division.																				
Bancroft	Putnam	574	12	67.2	−4.3	90	30	47	1	35	5.05	+0.47	1.10	0.0	13	17	0	13	ne.	R. E. Dent.
Beckley ††	Raleigh	2,440	16	65.8	−1.5	85	2†	42	1†	39	4.44	+0.11	.98	0.0	10	15	6	9	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	69.6	+0.7	86	30	45	1	33	2.99	−1.98	1.20	0.0	7	19	4	4		Norfolk & Western Ry.
Charleston	Kanawha	597	13	70.4	−2.4	93	30	49	1†	40	5.33	+0.84	1.32	0.0	12	17	4	9	w.	G. V. Lewis.
Clay	Clay	706	0								5.29		1.11	0.0	9					Prof. E. H. Knabenshue
Cuba ††	Jackson	650	14																	C. T. Perry.
Dam 22 O. R.	Jackson	538									3.65		0.58	0.0	14				w.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505									4.64		1.35	0.0	13				sw.	U. S. Engineer Office.
Dunlow	Wayne	703	8			90	28†				8.56		2.40	0.0	10	12	3	15	w.	James W. Damron.
Elkhorn	McDowell	1,933	23	66.9	−1.7	88	26†	47	1	31	6.57	+1.44	1.10	0.0	13	8	16	6	w.	J. J. Lincoln.
Evans	Jackson	606	0								6.83		1.64	0.0	12	14	3	13		B. F. Sayre.
Green Sulphur Spgs.	Summers	1,600	20	65.4	−3.2	89	27†	43	9	40	4.20	+0.21	1.20	0.0	10	12	7	11	e.	W. H. Gwinn.
Hinton	do	1,450	19	68.1	−2.8	90	27	46	1	34	4.74	+0.65	1.20	0.0	11	9	3	18	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	63.2		86	2†	37	1	43	5.23		1.20	0.0	14	11	9	10		R. E. Ferguson.
Huntington	Cabell	538	20	69.0	−3.7	91	30	51	1†	34	4.80	+0.56	1.44	0.0	12	15	8	7	w.	L. H. Hutchinson.
Lewisburg	Greenbrier	2,200	16	65.0	−2.5	88	30	40	1	38	5.55	+1.48	2.16	0.0	15	21	2	7	w.	Geo. T. Argabrite.
Logan	Logan	687	13																	W. H. Oliver, Jr.
Madison	Boone	704	10																	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	60.5	−5.1	82	23	36	1	38	5.32	+0.54	0.98	0.0	16	3	20	7	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23																	Miss Donna Tully.
Point Pleasant	Mason	553	23	68.2	−4.7	91	27	44	1	37	3.67	−0.73	0.76	0.0	11	6	15	9	sw.	W. D. Holmes.
Powellton	Fayette	933	20	67.9	−2.9	90	30	46	1	39	5.24	+0.52	1.00	0.0	9	16	6	8		S. C. Lampert.
Renick	Greenbrier	1,653	0								7.40		2.00	0.0	8				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	16	70.6	−0.8	92	29	46	4	34	5.53	+1.41	1.19	0.0	15	19	2	9	s.	E. C. Brace, Jr.
Ryan	Roane	700	13	65.4	−3.7	90	27	45	11	32	5.45	+0.09	1.42	0.0	12	10	12	8		Wm. E. Ryan.
Spencer	do	784	12	65.6	−3.9	89	26	40	13	40	5.54	+1.09	1.50	0.0	13	9	9	12		A. M. McKown.
Sutton	Braxton	839	10																	Ben Gillespie.
Union	Monroe	2,250	12	65.0[a]	−1.8	88[a]	26	41	1	39[a]	4.55	+0.49	1.10	0.0	8					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	63.4		84	21†	40	1	39	4.77		0.90	0.0	14	18	5	7	w.	J. M. Ayres.
Williamson	Mingo	660	16	70.4	−1.9	91	30	52	9	35	4.73	−0.12	0.92	0.0	13	18	6	6	w.	J. F. Keyser.
Averages and	Extremes			66.8	−2.8	93	30	36	1	43	5.14	+0.45	2.40	0.0	12	13	7	10	w.	
State Averages and	Extremes			65.8	−3.3	94	27	35	1	45	5.42	+0.92	2.40	0.0	12	13	8	9	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for June, 1916.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac			.37	T.		.72	.18	.15	.25	.20			.04	.01	.38	1.17			.47		.71			.37	.12					T.		5.14
Brandywine	do			.30				.13	.72	.10	.35					.42					.34				.14								2.50
Burlington	do		.10	.38			T.	.30	*	.60	1.00					.53	.37			.10		.15			.60	.10							4.23
Harpers Ferry ‖	do			.20				1.30		.40	.48					1.15	1.60	.50	.12		.11		.27			.45			2.00				8.58
Lost City	do																																
Martinsburg	do			.30				1.28	*	.81	.10					*	1.83	.77		J.		.37				.15		1.43					7.04
Moorefield	do			.70					.43	2.30	.35					.21	.41	.25		.02		.40			.05	.25							5.37
Piedmont	do			.21			.06	.28	.20	.25	.59					.42	.76	.33		.21		.50	T.		.06	.48							4.15
Romney	do			.38				.30	.31	.20	.27					.32	1.36			.12		.31				.30							3.87
Upper Tract	do			.45		T.	T.	.18	.68	.30						.35	.30	.25		.08		.65			.35	.14							3.73
Northern Division.																																	
Bens Run	Ohio			.95			.65	.33		3.00	.11	.15				1.25		.11	.15	.20		.87											7.77
Brandonville ‖	Monongahela			.86	.26			.29	.22	.10	.60					.15	.84	.45		.33	.29		1.29			.98							6.66
Buckhannon	do			.70			.11	.50	.48	.03	.44				T.	.42	.43			.60		.46			.70		.40				T.		5.27
Cairo	Little Kanawha																																
Central Station	Middle Is. Creek			.27			.75	.52		.16	.75	.10					1.65			.68		.92					.04						5.84
Cheat Bridge ‖				.64	.06		.24	.04	.31	.20			.11				.40	.65				.67	.18			.47							3.97
Cortland ‖	Monongahela			.98				.15		.18		.66					.60	.70		.51		1.21				1.30							6.29
Creston ‖	Little Kanawha			.32	.30	.03	.04	.71	.05	.06	.47	.60				.10	.93	.30	T.	.60		T.	.28			.53							5.32
Davis ‖	Monongahela			.60	.04	.08			.06	.42	.28	.15				.15	.37	.82		.47	.18		1.13			1.44							6.19
Elizabeth ‖	Little Kanawha			.59		.08		.93		.04	.52	.24				1.35	.14		.44			.24	.08			.29							4.94
Elkins ***	Monongahela			.73		.06	5.05	.35	.06	.23	.02	T.			T.	.29	.52	.02		.57		.68			.31	.99					T.		4.86
Fairmont ‖	do			.35	.12			.82	.20	.02	.25	.20				1.09	.75	.07	.10	.30	.05	.33	.43			.15							5.23
Glenville ‖	Little Kanawha				.25			.59			.55	.12				.52	.50	.05		.54		.45				.93							4.50
Grafton	Monongahela						.73	.73		.28	.32	*	*	*	*	*	*	*	*	1.70													
Lost Creek	do			.28			.11	.40	T.	.12	.45	.11		T.		1.74	.06		T.	.52		.42				.03		T.			T.		4.24
Mannington	do			.80		.01	.27	.70		.14	.72	.09				.88	.07	.03	.30	.21		1.24			.03	.95							6.44
Morgantown ¶	do			1.03		.01	13	.51	.03	.18	.13					1.26	.49	.32	.03	.31		1.25				.83							6.51
Moundsville ‖	Ohio			.94		.10	.15	.59	.09	.24	.13					.80			.10	.14						.06							3.37
New Cumberland	do		T.	1.58	T	.03	T.	.47	.05	.27	.32					.19	T.	.20	.13	.28		.70			.32								4.54
New Martinsville	do			1.08			.44	.70			.25	.30				1.85	.10		.15	.20		1.65				.42							7.14
Parkersburg ***	Ohio		.02	.18		.01	.71	.04	.09	.09	.20					.43	.02	.01	.11	.20		1.15			.04						T		3.30
Parsons	Monongahela			T.			T.	T.	T.	.33	T.	T.		.53		T.	.75	.46			T		.68		.88	T.					2.15		5.78
Philippi	do			.35			.05	.63	.32	.40	.25					.70	.35	.05		.74		.65			.05	.25							4.79
Pickens	do			.89		.04	.30	.15	.05	.10	.07	.04			.17	.38	.55			.98		.22			.28	1.09							5.31
Rowlesburg ‖	do			.28	T.			.36	.16	T.	.32	.10				T.	.96	.80		.50	.18		.64			1.80							6.10
Saint Marys ‖	Ohio			.37	.43			.73	.09	T.	.10	.38	T.		T.	.30	1.40	J.	.12	.12	.18	.80	.25	T.									5.27
Smithfield ‖	Fishing Creek			.62	.12			1.44	.16		.79	.54				.57	.89	.07	.10	.32	.07	.83	.28			.77							7.56
Terra Alta	Monongahela			.22		1.20		1.12	1.62	.30	.18	T		.36	1.60	1.23	1.76		T	.86	1.25	.64	.12		2.08								14.54
Wellsburg	Ohio		T.	1.30			.05	.45	.05	.15	.28					.26		.10	.35	.54		.54				.12							4.19
Weston ‖	Monongahela																																
Wheeling ‖	Ohio			1.38	.10	.07		.61	.33	.06	.20	.11	T.			.01	.28	.01	.30	.10	.07	.40	.25			.38							4.66
Southern Division.																																	
Bancroft ‖	Great Kanawha			1.05		.05	.14	.64			.65	.24				1.10	.05	.20	.05	.75	.08					.05							5.05
Beckley	do		.70						.40	.60	.50		.09			.43	.30			.06		.40			.96								4.44
Bluefield	do			.80			.45	.15		.10	.20					1.20	.04																2.99
Charleston ‖	do			.72	.09		.20	1.00	T.	.25	.38	.30				.42	.40	.20	T.	1.32						.25							5.33
Clay ‖	do			.30			.50	.88				.30				.30	.90		.50		1.11					.50							5.29
Cuba	Sand Creek																																
Dam 22 O. R. ‖	Ohio			.28	.34	.07	.05	.58	T.	.11	.44	.39				.52	.10	.05	J.	.45	.02	.22											3.63
Dam 26 O. R. ‖	do			1.35	.15	.07	.26	.58		.25	.29	.27				.31	.17	.13	.03	.78													4.64
Dunlow	Big Sandy					*	*	3.00	.73	.07	.12			.04			1.60		2.40						.40								8.36
Elkhorn	do	.25					.78	.87	.12	.23	.05					.65	.46	.10	.39	.65					.92	1.10							6.57
Evans	Ohio			1.64		T.	.34	.32	.10	.72	.99	.08				.83	.09	T.	.05	1.40	T	.27											6.83
Green Sulphur Spgs.	Great Kanawha					T.	.65	.15	.75	.50	J.		.10		.20	1.00			.10		.15	T.				.60							4.20
Hinton ‖	do			.60			.04	1.04		.02	.54	.12				.70	.50	.20			.18	T.				.80							4.74
Holcomb ‖	do			1.20		*	*	.69	.20	.03	.22				.04	.87	.15			.59		.23			*	1.01							5.23
Huntington ‖	Ohio			.72		.18	.60	.50		.14	.22	.18				.50	T.	.20	.12	1.40	.04	T.				T.							4.80
Lewisburg	Great Kanawha				.85	.05	.66	.20	.14	.30	T.				.07	1.01	1.15	.03		.11	.03	.03			.69	.23							5.55
Logan	Guyandotte																																
Madison ‖																																	
Marlinton	Great Kanawha			.76		.24	.55	.08	.26	.24	.14				.16	.98	.92		.02	.08	.06	.42			.09	.32							5.32
Nuttallburg	do																																
Point Pleasant ‖	Ohio			.64	.10			.75		.22	.18	.24				.28	.02	.22		.76		.26											3.67
Powellton	Great Kanawha						.50		1.00		1.00	.50				.50	.27			.61		.06			.80								5.24
Renick ‖	do			.50				.80			.80					2.00	.80	1.10	.10							1.30							7.40
Robertsburg ‖	do			1.19	.15	.07	1.00	.44	.02	.09	.28	.26				.70	T.	.20	.06	.72		.15				.20							5.53
Ryan	do			1.42		.14	.74	.28	T.	.16	.48					.75		T.	.01	1.04		.07	.26		T.	.10							5.45
Spencer ‖	Little Kanawha			.20	.25	1.50	.80		T.	.60	.25					.49	.40	.15		.60	.10	.10				.10							5.54
Sutton	Great Kanawha																																
Union ‖	do			.40			.60		.10	.40						.90	1.10			T.		T.			.20	.85							4.55
White Sulphur Spgs.	do			.90		.02	.28	.16	.26	.41	.13					.84	.56	.13	T	.07	T	.02			.24	.75							4.77
Williamson ‖	Big Sandy			.92		T.	.10	.81		.08	.08	.30				.14	T.	.70	T.	.20	.26	.05	.23				.86							4.73

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

¶ Precipitation on 21st estimated.

Daily Temperatures for June, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	69	79	76	67	71	64	60	62	71	69	68	72	69	73	70	74	71	70	69	70	69	66	78	79	74	81	81	78	83	69		71.7
	Minimum	35	46	56	39	49	42	50	43	49	51	49	43	42	42	59	53	50	53	53	52	47	47	40	39	60	47	55	56	55	50		48.4
Burlington	Maximum	75	83	82	75	80	68	64	68	69	72	74	79	78	77	69	75	78	78	78	78	68	75	78	83	79	83	86	82	79	70		76.1
	Minimum	39	48	59	44	49	47	56	55	54	49	54	48	52	51	60	60	55	57	59	55	54	47	45	52	65	56	59	64	59	64		53.9
Martinsburg§	Maximum	77	84	84	80	84	77	63	76	71	75	76	81	81	85	65	82	82	83	82	82	82	76	81	89	83	88	91	85	86	76		80.2
	Minimum	43	49	56	50	54	52	56	53	55	52	54	52	55	55	61	62	62	55	60	58	57	51	52	57	63	60	65	64	62	65		56.3
Piedmont	Maximum	77	81	76	77	79	74	64	68	68	68	73	79	79	77	69	74	80	80	75	78	74	71	79	83	77	81	84	79	80	71		75.8
	Minimum	40	46	56	42	48	46	49	55	52	48	52	48	50	50	61	58	55	49	58	52	50	46	40	46	61	49	55	58	52	58		51.0
Romney	Maximum	77	88	80	78	82	80	70	72	69	74	76	80	80	81	78	80	80	81	81	81	80	76	81	82	84	85	91	89	85	81		80.1
	Minimum	41	53	50	46	50	47	55	55	54	50	54	47	50	50	64	60	56	50	60	54	53	46	44	52	65	55	65	60	62	64		53.7
Upper Tract	Maximum	78	85	80	76	73	70	67	75	70	74	71	79	76	79	76	77	78		77	77	78	78	76	82	82	85	90		90	86		78.0
	Minimum	38	50	59	40	47	46	53	45	46	45	43	45	53	50	60	59																48.7
Northern Division.																																	
Bens Run	Maximum	80	83	79	76	80	69	66	79	72	68	77	79	82	84	79	76	77	76	77	78	73	77	82	84	84	86	87	83	83	82		78.6
	Minimum	47	57	60	47	55	56	59	52	53	52	52	54	52	57	61	56	58	57	61	55	58	50	51	55	63	58	60	62	60	61		56.0
Buckhannon	Maximum	77	82	75	73	78	73	69	75	73	72	66	76	75	82	73	77	75	76	75	72	79	70	78	85	84	80	86	81	83	79		76.6
	Minimum	43	60	55	46	53	53	60	52	48	56	51	48	50	52	63	56	55	52	62	60	57	48	47	52	55	64	56	58	52	54		53.9
Creston	Maximum	81	84	77	77	81	73	69	76	72	74	76	84	82	84	75	74	78	79	79	79	83	77	83	85	85	87	91	86	89	82		80.1
	Minimum	45	54	60	48	52	58	59	50	48	52	51	54	51	53	63	55	55	52	62	55	58	48	50	54	64	55	57	62	56	59		54.7
Elkins	Maximum	80	84	72	72	73	70	64	72	69	72	70	75	74	82	72	79	74	74	73	75	78	72	81	87	79	84	86	79	84	80		76.2
	Minimum	40	49	51	44	50	52	53	49	45	47	50	48	48	48	62	56	53	50	58	55	54	46	46	49	59	54	56	57	53	55		51.2
Fairmont§	Maximum	81	85	76	78	80	70	66	79	74	71	77	81	81	87	69	79	79	78	79	81	76	77	83	88	85	89	89	87	85	79		79.6
	Minimum	45	48	65	47	54	54	58	51	49	51	55	52	52	54	59	57	57	52	59	56	58	48	48	54	62	57	58	62	61	61		54.8
Glenville	Maximum	85	87	88	80	80	80	81	80	78	75	78	82	84	88	84	76	80	80	82	83	82	85	88	88	87	90	90	88	90	88		83.6
	Minimum	46	55	51	45	43	49	52	46	41	45	44	45	53	55	63	57	55	52	62	66	68	49	51	54	56	60	50	62	58	60		53.1
Grafton	Maximum	81	85	80	80	81	73	69	78	77	76	75	80																				
	Minimum	43	51	50	49	52	50	58	50	48	50	49	50																				
Lost Creek	Maximum	79	84	81	74	79	75	70	77	73	71	74	78	83	74	70	75	74	76	75	77	77	74	82	84	82	87	86	84	85	77		77.9
	Minimum	42	51	56	49	52	51	59	49	46	49	49	47	48	60	62	54	52	54	61	53	55	45	45	50	64	52	55	62	54	57		52.8
Mannington	Maximum	77	82	81	73	76	74	65	74	71	68	71	76	77	81	74	73	74	75	74	75	73	73	78	83	80	83	85	79	83	78		76.2
	Minimum	40	49	58	43	50	47	58	48	46	50	49	49	48	51	60	54	56	50	60	53	53	45	43	50	63	53	54	58	57	58		51.8
Morgantown	Maximum	86	88	77	75	76	74	65	76	74	70	72	76	77	84	81	78	75	75	74	77	75	72	78	85	80	86	85	79	82	78		77.4
	Minimum	44	61	57	45	54	52	55	52	52	50	53	50	51	54	61	61	62	56	60	52	59	47	45	55	63	55	57	60	56	62		54.7
New Cumberland	Maximum	76	78	77	73	76	66	62	72	69	68	73	74	79	80	74	74	75	75	73	73	67	74	80	84	78	84	83	76	85	76		75.1
	Minimum	35	62	55	40	40	42	55	50	46	49	46	44	45	52	59	54	55	52	57	45	48	43	52	52	55	45	54	54	49	54		49.6
New Martinsville	Maximum	79	84	80	76	80	75	65	74	71	68	76	81	82	85	79	77	77	77	78	80	75	77	83	84	84	88	88	83	88	81		79.2
	Minimum	44	54	58	47	53	52	60	51	51	53	53	55	54	56	61	56	59	55	62	54	58	49	48	54	65	57	58	61	61	60		55.3
Parkersburg	Maximum	78	85	75	77	78	69	68	73	69	66	74	76	79	83	78	74	77	77	76	78	76	73	82	84	82	86	86	80	86	80		77.5
	Minimum	50	63	56	48	58	59	60	55	55	55	51	52	55	58	63	59	58	59	63	56	58	52	54	58	65	61	62	62	60	62		57.6
Parsons	Maximum	77	85	75	76	74	74	64	71	69	70	71	73	75	80	75	65	75	76	70	74	70	72	85	80	78	83	83	84	79	79		75.1
	Minimum	39	55	45	45	46	46	53	50	50	48	52	45	47	50	58	57	49	48	56	55	49	52	44	45	50	53	56	54	60	58		50.5
Philippi	Maximum	79	84	81	74	78	77	71	76	76	74	72	77	79	85	77	80	77	77	74	77	76	73	80	87	82	85	88	81	88	81		78.9
	Minimum	42	58	54	46	55	51	58	53	51	51	54	54	50	55	62	58	55	56	57	55	55	57	45	54	63	54	59	61	57	60		54.7
Pickens	Maximum	77	82	70	75	69	67	62	67	67	66	67	77	72	78	69	71	72		68	67	74	71	76	80	75	79	82	75	79	77		72.8
	Minimum	39	54	49	41	48	41	50	48	47	48	48	47	47	50	58	54	50		58	53	53	48	45	54	60	53	58	55	53	56		50.5
Terra Alta	Maximum	74	76	68	65	68	67	69	68	70	70	66	68	70	69	72	70	71	70	68	70	71	72	71	69	70	68	72	70	73	72		69.9
	Minimum	38	50	52	40	52	50	49	51	55	46	46	50	50	51	54	48	52	48	51	50	48	53	52	51	54	49	53	54	60	58		50.5
Wellsburg	Maximum	70	78	75	70	72	65	60	75	70	66	69	73	75	76	79	75	72	71	68	70	65	70	72	81	76	80	81	75	81	73		72.7
	Minimum	42	58	57	45	55	50	56	51	52	51	51	51	52	61	63	58	57	54	59	55	50	45	46	58	60	54	60	56	55	60		54.1
Weston§	Maximum																																
	Minimum																																
Wheeling§	Maximum	85	89	76	79	82	67	66	78	75	72	81	85	88	88	78	79	79	80	76	83	67	82	85	89	87	91	92	87	93	77		81.0
	Minimum	44	56	63	46	53	51	59	52	52	52	52	54	52	58	61	56	58	54	61	52	54	46	47	44	60	57	59	61	60	60		54.3
Southern Division.																																	
Beckley	Maximum	81	80	80	81	79	80	77	78	78	76	81	78	80	83	74	76	77	79	80	81	80	81	84	80	81	83	80	81	85	85		80.0
	Minimum	42	42	52	54	49	49	48	55	48	45	48	48	50	50	49	54	53	56	56	50	53	55	57	55	54	54	58	59	51	58		51.9
Bluefield	Maximum	78	80	80	78		78	67	71	70	70		75	75	77	75	75	75	76	77		80	80	84	84	84	84	85	84	86		79.2
	Minimum	45	59	61	47		47	56	65	59	61		64	60	57	65	62	59	60	65		64	62	67	66	68	66	65	65	65	64		60.9
Charleston	Maximum	89	90	89	87	82	79	76	72	78	79	79	82	85	81	81	79	80	84	82	81	80	85	85	87	87	90	92	91	90	93		83.9
	Minimum	49	55	61	54	51	60	61	52	49	50	52	57	54	54	61	60	52	55	62	62	60	55	53	57	66	59	60	65	59	59		55.8
Elkhorn	Maximum	78	80	79	76	76	73	70	73	70	68	75	78	77	82	79	71	73	78	78	76	81	80	84	83	79	88	88	88	87	87		78.5
	Minimum	47	57	65	48	50	58	54	52	48	49	49	49	51	52	63	58	50	51	49	59	60	59	53	59	62	57	62	62	62	63		55.3
Green Sulphur Spgs.	Maximum	80	85	77	75	77	74	69	73	70	74	77	75	80	81	82	76	77	77	78	74	83	80	86	84	82	88	89	88	88	89		79.6
	Minimum	44	53	60	46	45	53	57	50	43	47	48	47	48	48	48	48	48	55	51	55	55	52	46	48	62	55	53	54	56	64		51.3
Hinton§	Maximum	80	87	79	77	80	75	70	75	74	78	76	80	78	82	70	73	78	8	88	86	85	80	83	86	81	87	90	89	89	88		80.8
	Minimum	46	53	56	50	49	53	59	55	49	51	52	58	53	53	56	59	52	53	57	57	60	53	51	53	64	60	60	63	61	61		55.1
Holcomb§	Maximum	80	86	73	74	76	72	66	72	69	73	70	78	77	79	72	76	78	77	73	72	80	76	83	82	84	85	86	82	86	85		77.4
	Minimum	37	50	60	47	46	51	57	47	42	47	45	46	45	45	55	49	48	49	45	53	52	48	43	47	48	50	52	65	50	53		48.9
Huntington§	Maximum	83	83	77	80	80	71	73	77	73	70	77	81	81	85	81	79	78	84	77	79	81	79	84	80	86	83	89	85	89	91		80.5
	Minimum	51	51	58	51	57	61	60	52	55	55	53	57	55	57	60	61	51	59	61	62	64	52	55	60	68	59	55	63	62	61		57.5
Lewisburg	Maximum	78	84	75	74	76	72	66	71	70	75	73	71	76	82	71	73	75	76	75	74	81	78	82	84	79	85	86	84	86	88		77.5
	Minimum	40	48	60	44	46	56	58	49	49	46	49	54	47	50	58	58	49	48	54	54	56	50	47	54	62	55	57	59	58	58		52.4
Madison§	Maximum																																
	Minimum																																
Marlinton	Maximum	70	76	68	72	70	62	64	66	62	64	68	74	72	74	60	68	70	76	68	68	74	74	82	78	74	78	78	76	80	80		71.5
	Minimum	36	44	54	40	46	52	52	48	46	46	48	48	46	46	56	56	50	46	56	50	54	44	44	48	60	58	54	54	56	60		49.5
Point Pleasant	Maximum	81	87	81	80	82	76	72	75	74	71	73	81	82	86	81	77	79	81	80	79	83	79	85	84	86	88	91	86	88	90		81.5
	Minimum	44	58	59	46	56	58	58	58	52	51	51	56	50	54	61	57	54	56	60	57	60	47	50	56	63	54	57	62	54	53		54.8
Powellton	Maximum	72	89	87	85	80	78	79	80	80	75	81	81	80	85	80	80	79	82	81	82	83	85	81	82	87	88	89	88	89	91		83.7
	Minimum	46	56	53	51	56	53	58	54	51	49	48	56	52	51	54	57	56	54	51	53	50	56	57	56	51	56	58	59	60	58		53.1
Robertsburg§	Maximum	82	85	73	79	76	73	70	73	75	72	71	78	83	85	79	76	77	82	77	80	80	88	88	83	83	90	90	85	92	87		80.6
	Minimum	52	55	65	46	65	58	60	62	60	63	62	64	59	60	52	67	64	64	65	64	50	60	54	62	67	62	65	63	63	62		60.6
Ryan	Maximum	80	84	73	75	76	72	65	75	65	72	75	80	80	85	76	65	73	81	75	76	80	75	80	80	83	82	90	85	87	83		77.1
	Minimum	50	58	58	48	50	51	55	50	46	50	45	53	57	63	62	54	50	49	61	54	59	48	48	54	65	54	60	54	56	52		53.8
Spencer§	Maximum	81	69	78	80	78	76	78	76	75	78	84	80	80	79	80	75	70	80	82	80	82	86	86	85	87	89	88	84	87	85		80.4
	Minimum	43	50	51	52	55	55	49	47	51	46	49	48	49	50	52	54	51	50	51	56	56	46	47	50	52	52	54	60	51	54		50.7
Union§	Maximum	80	82	80	79	76	79	72	73	71	75	77	78	80	74	73	71	77	78	72	82	79	83	82	82	84	88	86	85	85			78.8
	Minimum	41	50	52	51	43	57	55	50	52	44	46	46	47	44	60	54	49	47	48	52	55	51	47	54	52	55	58	58	58	60		51.3
White Sulphur Spgs.	Maximum	79	73	79	70	75	71	68	73	72	75	74	75	75	77	72	69	72	74	74	69	84	77	81	81	79	82	83	84	83	82		76.1
	Minimum	40	11	47	46	44	56	58	49	48	46	47	54	47	48	59	59	49	48	52	55	57	51	55	56	50	43	52	58	58	58		50.7
Williamson§	Maximum	85	88	77	79	81	75	72	77	74	79	80	81	82	84	81	77	79	83	78	71	85	80	85	80	85	88	90	88	89	91		81.5
	Minimum	53	55	63	54	56	57	60	57	52	55	56	57	56	57	60	63	57	57	62	64	64	61	57	60	65	63	64	65	65	67		59.4

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, June, 1913.



WE

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JULY, 1916

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
AUGUST 23, 1916

Departure of the Mean Temperature from the Normal, July, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

F

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXIV. PARKERSBURG, W. VA., JULY, 1916. No. 7.

GENERAL SUMMARY.

July was characterized by a deficient and unfavorably distributed rainfall and continuously high temperature after the first decade, giving an average temperature considerably above the normal. The highest and lowest readings at the different stations, however, were well within previous July records. Heavy rains and floods in the New-Kanawha valley on the 16-17th caused much damage to crops on the bottom lands. Conditions were generally favorable for growth and harvesting, and all crops made rapid progress, especially during the last decade. The wheat yield was near the average and the hay crop was large, while the outlook for corn, oats, potatoes, apples, and buckwheat was good. Heavy rain and wind squalls, however, caused considerable damage to corn in many localities. The prospect for peaches was fair to poor.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.01 and 30.00 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.27 inches on the 30th, and 29.73 inches on the 2d. Elkins, 30.28 inches on the 30th, and 29.70 inches on the 3d.

TEMPERATURE.

The monthly mean for the State, 43 stations reporting, was 74.8°. The mean departure from the normal for 38 stations having ten or more years of record was + 1.8°. The temperatures were continuously above the normal in practically all sections, except from the 3d to the 10th. The readings were near the normal, however, on the 16-17th and 24-25th. The highest temperatures occurred on the 12-14th and 27th-31st, while the lowest were noted on the 5-7th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 80 per cent; 8 p. m., 70 per cent. The July averages for the same hours for the past 28 years are 79 and 67 per cent, respectively. Elkins, 8 a. m., 85 per cent; 8 p. m., 76 per cent. The July averages for Elkins for the same hours for the past 16 years are 87 and 78 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 59 stations reporting, was 3.49 inches. The departure from the normal for 44 stations having ten or more years of record was — 0.93 inch. The rainfall was heaviest over the southern, central mountain, and eastern panhandle counties, and lightest over the Monongahela basin and northwestern counties. Scattered and mostly light showers occurred from the 1st to the 3d and the 9th to the 14th. Heavy rain fell from the 15th to the 17th, especially on the 15-16th over the southeast counties, where floods occurred, causing much damage to crops. The following crest stages were noted in the New-Kanawha river: Radford, 32.0 feet; Hinton, 16.0 feet; Charleston, 31.7 feet. Showers also fell in many sections on the 21st-22d and from the 24th to the 28th.

WIND.

The average wind velocity at Parkersburg was 3.9 miles per hour, or 0.6 mile below the July average for 26 years. The average at Elkins was 2.9 miles per hour, or 0.1 mile below the July average for 17 years. The highest velocity at Parkersburg was 36 miles per hour from the northeast on the 27th, and at Elkins 23 miles per hour from the northeast on the 27th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 58 per cent of the possible amount, or 3 per cent below the July average for 19 years. The average at Elkins was 53 per cent, or 1 per cent below the July average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 2d, 4th, 5th, 6th, 7th, 8th, 22d, 23d, 24th, 25th, 26th, 27th, 28th, 29th, 30th, and 31st; Bayard, 10th, 16th, 17th, 18th, 19th, and 22d; Dam No. 26, 24th, 26th, and 28th; Elkins, 5th, 20th, 27th, 28th, and 31st; Hinton, 13th; Holcomb, 31st; Mannington, 2d, 3d, 5th, 6th, 7th, 8th, 11th, 12th, 13th, 14th, 20th, 22d, 24th, 26th, 27th, 28th, and 31st; New Cumberland, 2d, 5th, 6th, 7th, 8th, 9th, 11th, 24th, 26th, and 31st; Pickens, 25th; Philippi, 5th, 7th, 8th, 22d, and 31st; Romney, 1st, 2d, 8th, 11th, 20th, 23d, 24th, and 30th; St. Marys, 27th and 31st.

Halos, solar: Brandywine and Romney, 8th.

Haze: Bayard, 26th and 29th.

Thunderstorms (dates and number of stations reporting): 1st, 2; 2d, 8; 3d, 3; 8th, 1; 9th, 2; 10th, 2; 12th, 8; 13th, 8; 14th, 7; 15th, 2; 16th, 1; 18th, 3; 19th, 1; 20th, 2; 21st, 9; 22d, 7; 23d, 2; 24th, 2; 26th, 1; 27th, 7; 28th, 1; 31st, 4.

Lunar eclipse observed generally throughout the State during the evening of the 14th.

COMPARATIVE DATA FOR JULY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	67.5	..	....	5.59	....	....	....	..	..	..
1892	73.4	98	41	4.20	....	....	....	..	..	..
1893	73.8	98	42	2.96	5.95	1.37	....	20	10	1
1894	73.3	100	36	2.21	4.84	0.50	....	10	19	2
1895	70.5	99	39	4.35	7.04	1.65	....	11	13	7
1896	73.3	97	46	5.07	15.70	2.91	....	9	12	10
1897	74.2	102	46	5.43	9.92	2.85	....	11	12	8
1898	75.0	103	40	4.46	8.33	1.53	....	12	7	12
1899	73.3	100	33	3.78	7.92	0.20	....	14	10	7
1900	74.7	104	41	4.38	7.88	1.72	....	15	11	5
1901	77.4	104	47	3.16	6.21	0.69	....	14	12	5
1902	74.2	104	45	3.54	8.42	0.96	....	14	12	5
1903	72.5	100	37	3.74	8.30	1.82	..	16	10	5
1904	71.5	97	42	3.28	6.00	1.04	....	14	12	5
1905	73.3	98	43	5.92	10.64	3.00	...	12	11	8
1906	72.4	98	45	4.54	7.40	1.50	...	12	11	8
1907	72.7	98	42	6.66	13.36	1.99	.	12	14	5
1908	74.0	100	41	5.21	9.43	2.08	....	14	13	4
1909	70.2	96	36	4.17	10.50	0.60	.	14	11	6
1910	73.8	98	41	4.92	13 16	0.54	...	13	12	6
1911	73.3	106	40	2.82	6.94	0.40	...	16	12	3
1912	75.0	100	45	7.48	15.22	2.67	....	12	12	7
1913	74.2	103	40	5.80	10.07	2.54	....	15	12	4
1914	73.1	106	38	4.11	7.74	0.98	....	16	10	5
1915	71.9	99	38	4.63	11.31	1.82	...	12	11	8
1916	74.8	102	42	3.49	9.47	1.06	...	16	8	7
Means and Extremes	73.1	106	33	4.61	15.70	0.20	....	14	11	6

Climatological Data for July, 1916.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	69.1	+1.3	87	30	42	6	41	4.17	0.79	0.70	0.0	13	7	9	15	w.	G. C. Dixon.
Brandywine	Pendleton	0	0	73.0	....	91	12†	46	6	41	3.45	.....	0.90	0.0	8	19	2	10	n.	Elmer Keister.
Burlington	Mineral	875	22	73.4	+0.6	91	12†	50	6	34	3.25	−0.38	0.84	0.0	9	6	22	3	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27	.....	.....	.....	.....	.....	.....	.....	4.28	+0.99	1.10	0.0	11	.....	.....	.....	e.	S. W. Lightner.
Lost City	Hardy	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. D. Hinegardner.
Martinsburg	Berkeley	435	24	77.0	+1.5	96	12	55	6	34	5.19	+1.29	1.45	0.0	11	17	11	3	s	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	77.4	+3.8	98	21	51	6	39	2.56	−0.95	0.55	0.0	9	27	2	2	.....	M. S. Henkel.
Piedmont	Mineral	919	9	71.1	.....	92	12	44	5	39	3.10	.....	0.75	0.0	14	16	7	8	se.	C. A. Suter, Jr.
Romney	Hampshire	824	19	75.9	+0.8	96	12	50	6	37	2.70	−0.87	0.60	0.0	10	6	21	4	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	72.9[b]	+0.5	91[b]	13†	47[b]	6	39[b]	3.77	+0.07	1.29	0.0	7	21	7	3	.....	J. M. Mallow.
Averages and	Extremes	.....	.....	73.7	+1.4	98	21	42	6	41	3.61	−0.09	1.45	0.0	10	15	10	6	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	77.6	+2.5	94	8†	56	4†	36	1.28	−3.55	1.08	0.0	4	27	2	2	.....	J. D. Riggs.
Brandonville	Preston	1,809	6	.....	.....	.....	.....	.....	.....	.....	1.92	.....	0.89	0.0	4	.....	.....	.....	.....	W. T. Miller.
Buckhannon	Upshur	1,411	20	75.8	+3.6	90	12	50	5†	37	4.44	−0.89	1.50	0.0	8	24	2	5	.....	H. A. Darnall.
Cairo	Ritchie	674	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Van A. Zevely.
Central Station	Doddridge	950	19	.....	.....	.....	.....	48[b]	7	..	5.33	+0.83	2.22	0.0	4	.....	.....	.....	.....	D. H. Doak.
Cheat Bridge	Randolph	3,600	4	.....	.....	.....	.....	.....	.....	.....	4.73	+0.23	0.83	0.0	10	.....	.....	.....	.....	Walter Cole.
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	2.77	.....	0.55	0.0	9	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	15	76.8	+2.1	96	12	55	7	40	2.92	−0.94	1.20	0.0	8	17	7	7	sw.	J. M. Reed.
Davis	Tucker	3,093	8	.....	.....	.....	.....	.....	.....	.....	3.15	.....	0.70	0.0	10	.....	.....	.....	.....	Ross C. Male.
Elizabeth††	Wirt	646	5	.....	.....	.....	.....	.....	.....	.....	2.55	.....	0.75	0.0	6	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,940	16	72.6	+2.1	89	20	51	6	35	6.29	+1.65	2.62	0.0	12	3	14	14	se.	U. S. Weather Bureau.
Fairmont	Marion	883	11	77.4	+3.2	97	12†	54	6†	39	2.04	−2.80	0.58	0.0	11	21	3	7	w.	F. P. Hall.
Glenville	Gilmer	738	23	79.0	+4.4	99	11†	54	4†	42	2.31	−3.17	0.83	0.0	7	14	12	5	w.	M. T. Brannon.
Grafton	Taylor	1,000	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Joseph Gerken.
Lost Creek	Harrison	1,026	19	75.0	+2.6	94	14†	48	6	41	3.38	−1.41	0.87	0.0	9	18	9	4	w.	Allen Smith.
Mannington	Marion	974	14	73.2	+0.7	91	27	48	6	36	3.00	−1.78	1.55	0.0	10	16	8	7	ne.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	75.6	+2.1	94	30	52	5	33	1.06	−4.19	0.27	0.0	8	18	4	9	s.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	14	77.4	+3.1	97	28†	52	6†	39	1.29	−3.48	1.20	0.0	2	25	0	6	sw.	M. Z. White.
New Cumberland	Hancock	987	19	73.3	+0.3	94	27†	46	6	41	2.62	−1.98	1.28	0.0	4	13	16	2	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	77.8	+2.3	97	14	54	7	38	2.86	−2.35	1.50	0.0	5	24	3	4	n.	Wm. Ankrom.
Parkersburg	Wood	638	28	77.7	+2.2	95	27	57	7	34	4.92	+0.26	1.72	0.0	11	12	12	7	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	71.2	+0.9	88	14†	42	6	41	4.28	−0.98	1.70	0.0	8	11	16	4	.....	J. W. Swisher.
Philippi	Barbour	1,149	20	75.3	+2.3	93	31	51	5†	35	2.70	−2.42	0.80	0.0	10	5	22	4	w.	Okey J. Robinson.
Pickens	Randolph	2,697	14	69.7	+0.9	86	14	49	5†	28	4.27	−2.08	0.96	0.0	9	15	9	7	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30	.....	.....	.....	.....	.....	.....	.....	3.66	1.18	1.38	0.0	8	.....	.....	.....	.....	J. F. Pierce.
Saint Marys	Pleasants	577	8	.....	.....	.....	.....	.....	.....	.....	2.85	.....	0.92	0.0	5	.....	.....	.....	nw.	Wm. Hughes.
Smithfield	Wetzel	885	11	74.4	+1.1	95	27	50	6	37	2.31	−3.42	0.58	0.0	7	25	3	3	nw.	G. M. Whisler.
Terra Alta	Preston	2,612	16	72.4	+2.9	91	31	48	1†	29	2.69	−3.28	1.24	0.0	5	17[d]	7[d]	3[d]	w	C. F. Dodge.
Wellsburg	Brooke	1,225	16	74.1	+2.3	91	27	55	5†	28	1.68	−3.98	1.00	0.0	4	17	11	3	w.	C. P. Waugh
Weston	Lewis	1,026	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss C. M. Davis.
Wheeling	Ohio	645	30	76.8	.....	100	23	44	6	49	1.73	−2.94	1.22	0.0	6	21	3	7	w.	Miss M. B. Forsyth.
Averages and	Extremes	.....	.....	75.5	+2.2	100	23	42	6	49	3.06	−1.84	2.62	0.0	7	17	8	6	w.	
Southern Division.																				
Bancroft	Putnam	574	12	77.9	+2.5	102	30†	55	4†	38	2.68	−1.80	1.40	0.0	6	19	0	12	ne.	R. E. Dent.
Beckley ††	Raleigh	2,440	16	73.4	+2.0	89	13	51	5	31	0.44	−2.42	1.93	0.0	7	13	12	6	w.	John A. Ewart.
Bluefield††	Mercer	2,558	21	73.2[1]	+1.4	86	13†	59[1]	23	20	3.17	1.45	1.00	0.0	8	11[d]	10[d]	6[1]	.....	Norfolk & Western Ry
Charleston	Kanawha	597	13	78.4	+1.5	97	27	54	7	40	3.56	+0.36	1.28	0.0	7	23	5	3	w.	G. V. Lewis.
Clay	Clay	706	0	.....	.....	.....	.....	.....	.....	.....	1.66	.....	0.30	0.0	5	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba ††	Jackson	650	14	77.0	+3.7	95	30	53	6	35	2.00	−2.26	2.00	0.0	2	8	22	1	w.	C. T. Perry.
Dam 22 O. R.	Jackson	538	.....	.....	.....	.....	.....	.....	.....	.....	1.71	.....	1.10	0.0	5	.....	.....	.....	.....	U. S. Engineer Office
Dam 26 O. R.	Mason	505	.....	.....	.....	.....	.....	.....	.....	.....	3.60	.....	1.25	0.0	8	.....	.....	.....	.....	U. S. Engineer Office
Dunlow	Wayne	703	8	.....	.....	93	26	.....	.....	.....	3.19	.....	1.74	0.0	4	23	0	8	w.	James W. Damron.
Elkhorn	McDowell	1,933	23	74.0	+1.9	89	2	54	5	31	9.47	+5.99	2.38	0.0	17	6	19	6	w.	J. J. Lincoln.
Evans	Jackson	606	0	.....	.....	.....	.....	.....	.....	.....	2.25	.....	1.70	0.0	10	19	2	10	.....	B. F. Sayre.
Green Sulphur Spgs	Summers	1,600	20	72.6	+0.4	95	26	46	7	41	3.28	+0.99	0.70	0.0	14	11	10	10	e.	W. H. Gwinn.
Hinton	do	1,450	19	75.0	+0.5	92	12	54	6	30	6.22	+2.99	1.38	0.0	12	10	7	14	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	73.4	.....	93	8	43	7	47	3.11	.....	0.82	0.0	11	10	7	14	.....	R. E. Ferguson.
Huntington	Cabell	558	20	78.4	+1.8	99	30	53	5	34	3.08	−1.04	0.92	0.0	9	9	5	11	w.	L. H. Hutchinson.
Lanes Bottom	Webster	2,062	0	.....	.....	.....	.....	.....	.....	.....	2.87	.....	0.80	0.0	12	.....	.....	.....	.....	C. A. Broddy.
Lewisburg	Greenbrier	2,200	16	72.6	+0.5	89	12	49	6	39	2.88	−0.99	1.10	0.0	9	21	5	3	sw.	Geo. T. Argabate.
Logan	Logan	687	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Oliver, Jr.
Madison	Boone	704	10	.....	.....	99	12	121	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	1	68.2	−1.0	84	27	48	5	30	7.14	+2.21	0.96	0.0	18	2	23	6	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	23	77.6	+1.0	99	27	52	5	42	2.86	−1.20	1.75	0.0	7	19	4	8	sw.	W. D. Holmes.
Powellton	Fayette	933	20	77.2	+3.0	98	11	52	6	41	2.16	−1.42	1.37	0.0	7	16	14	1	.....	S. C. Lampert.
Renick	Greenbrier	1 653	0	..	..	.....	.....	.....	.....	.....	4.25	.....	1.10	0.0	7	.....	.....	.....	se.	Wm. B. Hill.
Robertsburg	Putnam	574	16	.....	.....	96	24	...	.....	.....	2.58	1.08	1.20	0.0	7	22	2	7	.....	E. C. Brace, Jr.
Ryan	Roane	700	13	75.2	+1.9	95	13†	48	7	44	4.26	−0.58	0.97	0.0	11	16	11	4	.....	Wm. E. Ryan.
Spencer	do	784	12	8.8	+0.9	94	12†	49	5	38	2.03	−2.07	1.18	0.0	7	4	22	5	.....	A. M. McKown.
Sutton	Braxton	839	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ben Gillespie.
Union	Monroe	2,250	12	73.2[a]	+2.4	90[a]	29	50	5	36	4.30	−0.21	1.20	0.0	7	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	69.7	.....	84	13†	50	5[1]	31	3.84	.....	0.98	0.0	9	24	3	4	w.	J. M. Ayres.
Williamson	Mingo	660	16	78.4	+2.7	92	2	58	6	30	4.11	−0.56	1.50	0.0	11	19	9	3	w.	J. F. Keyser.
Averages and	Extremes	.....	.....	74.7	+1.5	102	30†	43	7	47	3.94	+0.14	2.58	0.0	9	16	8	7	w.	
State Averages and	Extremes	.....	.....	74.8	+1.8	102	30†	42	6	49	3.49	−0.93	2.62	0.0	9	16	8	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for July, 1916.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
ayard	Potomac			.45						.26	.14	.13	.67	T.	T.	.01	.28	.56	.60			.08	.70			.17		.12					4.17
andywine	do		.85	T.						.38	.04				.50	T.	.15	.75	.16				T.			.62	T.		T.				3.45
rlington	do		.25							.20			.24	.60			.55	.66				.10	.10			.55							3.25
arpers Ferry ‖	do										.30	.28			1.10	.10	.58	.15	.14						.12	.60	.58		.33				4.28
st City	do																																
artinsburg	do		T.							.15	.38			.68		.21	.58	.16				1.38	.05		*	1.45		.15					5.19
orefield	do			.25							.55			.31	.37		.37	.37	.05			.02				.27							2.56
dmont	do			.08							.01		.03	.01	.44	.14	.52	.43	.23	.01			.75		.27	.16	.02						3.10
nney	do		.31								.23		.05	.15	.20		.32	.21	.23			.40				.60							2.70
pper Tract	do			.40							.54				.42	T.		1.20	.48				.25			.18		T					3.77
Northern Division.																																	
ns Run	Ohio																1.08	.15	.02								.03						1.28
andonville ‖	Monongahela												T		T.			.77	.18				.68			.89							1.92
ckhannon	do									.20	.15		1.06	.35			.45	1.50	.66			T.				.07		T.					4.44
iro	Little Kanawha																																
ntral Station	Middle Is. Creek									T.					.98		*	2.13	T			2.22											5.33
at Bridge ‖	do			.83							.50		.40	.06	.11		.20			.42		.80	.81				.60						4.73
rtland ‖	Monongahela										.50				.38		.22	.38	.55				.19			.42		.11	.02				2.77
ston ‖	Little Kanawha									T	.12				.10	T.	1.20	.14		.25	T	1.00	.05						.06				2.92
vis ‖	Monongahela			.70							.50		T.		.31	.02	.31	.63	.35				.13		T.	.10		.10		T.			3.15
izabeth ‖	Little Kanawha											.20			.65		.75	.75				.14	.05										2.55
kins ***	Monongahela		2.50	.12	T.					.23	.17		.53	.17			.53	1.06			T.	T.	T.		.02	.57	T.	.48				.11	6.29
rmont	do				.29						.02	.08			.10		.26	.12	.30	.58			.20			.07		.02					2.04
enville ‖	Little Kanawha										.16	T.		.12	.52		.83	.06	.32				.30										2.31
afton	Monongahela																																
st Creek	do				.87					T.					.32		68	.75	.60			.05	.04	.03			.04						3.38
annington	do				.02						T.		.04		1.56	.03	.38	.31	.23			.17	.24	.03									3.00
rgantown ¶	do				.03						.03				.10		.17	.27	.03				.17			.26							1.06
undsville ‖	Ohio																1.20	.09															1.29
w Cumberland	do				.95						.11				T.	T.	1.28	T.			.28	T.			T.							T.	2.62
w Martinsville	do																1.50	.25	.25			.05	.81										2.86
arkersburg ***	Ohio									T.	.05	.03		.11	.04	.64	.90	T	1.03	1.72		.04					.35				.01	4.92
rsons	Monongahela		T.	.50						T.	.24			T.	.82		.28	1.70					.17			T.	.17	T.	.40				4.28
ilippi	do			.40							.10		.50	.08			.38	.80	.20				.10			.10		.05					2.71
ckens	do			.96						.31	.09			T.			.40	.31	.76			.46				.12		.86					4.27
wlesburg ‖	do										1.38		.34		.08		.24	.20	.30	T			.98			T.	.08						3.66
int Marys ‖	Ohio											.05					.92	.60	T.	.85	T.		.43	T.				T.					2.85
uthfield ‖	Fishing Creek				T.						.23		T.	.50	.49	.05	.58			.54			.34										2.51
rra Alta	Monongahela						T.			.05						.12	1.18	1.24							.10						T		2.69
llsburg	Ohio													.13			1.35	.03	T				.12		T.								1.63
ston	Monongahela																																
eeling ‖	Ohio	T.		.10								T.			.03	.09	1.22	.27	T.	T.			.02										1.73
Southern Division.																																	
neroft ‖	Great Kanawha									*	*						1.40	.60		.30								.38					2.68
ckley	do									1.06					.46	1.23	1.30		1.63							.41					.35		6.44
ttfield	do			.20								.50				1.00	1.5				.20		.25					.17	.65				3.12
arleston ‖	do	.30		.45						.50	T.				1.28		1.06				T.		.78						.68				5.05
ay	do			T							T.			.30		.20	.50			.50	.30												1.60
ba	Sand Creek									T.	T.				T.	.10	1.90										T.						2.00
m 22 O. R. ‖	Ohio										T.				.25		1.16	.30															1.71
m 26 O. R. ‖	do	.17									.15				.92		1.14	.11		.40			.08						.68				3.65
ndow	Big Sandy								.60	.40		1.74														.45							3.19
khorn	do			.12						.56	.14			.05		.96	1.34	.17	.28	.23	2.58		.41	.76	.21	.43	.16	.67	.40					9.47
ans	Ohio	.04						.56	T.	.02	.03			.35		.08	1.70	T.	.18			.05	.22											3.23
en Sulphur Spgs	Great Kanawha	.38		.10						.65	.65		.45		.25	.55	.60	.10					.30	.15				.65	.35	.10			5.28
nton	do		T.	.02						.14	.82			.72		1.38	.80	.64		.34			.72					.36	.20	.08			6.22
coomb	do	.18	*	.58						*	.82					*	*	.72				.72						.06	.03				3.11
ntington ‖	Ohio			.32						.14	.30		.04				.92	.14		.70							.68		.14				3.38
nes Bottom ‖	Great Kanawha	.10				.20		.11			.12			.21	.09	.12	.20	.05				.86	.80				.01						2.87
wisburg	do	.02	.16							.13	.21					.17	1.10	.24				.10				.45							2.88
gan	Guyandotte																																
dison ‖															.85		1.02				1.35	.06	.10										††
rlinton	Great Kanawha	.56		.73				.03	.96	.34		.56	.46	.12	.15	.82	.30			.23	.96	.12		.04	.06		.12	.60					7.14
ttaliburg	do																																
nt Pleasant	Ohio	.10										.20			.40		1.75						.17			.10		.08					2.86
wellton	Great Kanawha													1.37		.66	.50	.10	.05	.30							.12						3.10
nick	do										.95						.90	.70					.30			.30		.20	.90				4.25
bertsburg ‖	do	.17								.05	.10				.08		1.20	.55					.23										2.38
an	do	.04								.01	.18	.21		.57		.86	.90		.24	.18		T.	.62					.38					4.26
ager	Little Kanawha									.10							1.18	.25			.15	.15	.10							.10			2.03
tton	Great Kanawha																																
non	do	T.								.80	T.				.20	.75	.75		T						T.		.40	1.20	.20	.10			4.40
ite Sulphur Spgs	do			.09						.60	.38					.36	.98	.22					.14					.93	.15				3.83
lliamson	Big Sandy									.36	.43		.01		.10	.01	1.50	.50	.86		T.	.10	.12			.12			T.				4.11

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

†† Probably incomplete.

Daily Temperatures for July, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	79	81	73	72	73	79	84	85	77	81	85	84	83	83	77	78	75	79	82	81	84	77	85	78	73	80	82	80	84	87	80	80.0
	Minimum	53	56	60	55	53	42	43	45	62	60	59	62	63	60	66	63	64	59	61	59	58	63	58	58	61	61	60	64	56	55	64	58.2
Brandywine	Maximum	84	89	83	78	80	82	90	89	83	81	86	91	91	89	84	79	79	82	85	87	90	85	89	84	80	84	90	85	85	91	89	85.3
	Minimum	67	58	61	55	50	46	49	50	66	64	61	62	63	63	66	65	67	67	57	64	62	62	61	62	65	63	62	63	66	55	63	60.8
Burlington	Maximum	80	87	82	78	78	81	85	89	81	84	83	91	85	84	87	75	75	82	83	85	89	83	88	86	77	86	91	85	82	90	89	83.9
	Minimum	63	62	64	60	58	50	51	57	64	65	63	65	65	68	64	68	69	60	64	65	65	68	66	64	67	67	65	65	60	58	56	62.8
Martinsburg§	Maximum	84	90	86	82	82	87	90	92	86	85	92	96	95	91	92	83	81	88	88	89	95	87	92	91	80	82	92	80	84	89	91	87.8
	Minimum	63	64	60	63	59	55	56	64	66	67	68	70	73	70	72	73	68	70	66	69	68	69	68	70	71	68	68	69	57	58	66	66.1
Piedmont	Maximum	81	85	80	77	79	79	85	89	78	79	89	92	91	87	83	69	74	80	81	84	85	79	80	84	73	83	87	82	79	89	85	82.2
	Minimum	57	57	58	57	49	44	48	50	58	63	63	64	62	65	65	64	65	68	61	63	61	65	61	60	64	66	62	63	57	55	66	60.0
Romney	Maximum	82	91	85	84	82	83	87	93	88	84	92	96	91	90	91	83	80	86	88	89	91	88	92	92	84	88	94	87	87	94	92	88.2
	Minimum	61	60	65	60	51	50	51	58	67	65	63	66	68	68	67	67	68	70	64	65	65	68	65	65	68	70	65	66	60	57	70	63.6
Upper Tract	Maximum	83	89	85	75	78	82	89	89	82	81	87	....	91	87	88	82	78	83	85	86	90	85	88	84	80	83	88	85	85	91	....	84.8
	Minimum	70	63	62	57	50	47	50	55	64	60	60	....	63	65	64	65	67	67	57	63	62	65	60	62	65	62	63	61	62	57	....	61.0
Northern Division.																																	
Bens Run	Maximum	87	89	82	82	86	89	92	94	80	92	92	92	90	91	90	87	85	86	89	89	83	91	94	91	90	87	91	94	93	93	90	88.9
	Minimum	64	63	65	56	65	56	56	59	67	68	67	70	69	69	67	68	71	72	71	71	72	65	64	68	69	65	68	68	69	70	66.4	
Buckhannon	Maximum	85	86	80	76	79	87	86	87	80	84	89	90	87	89	89	80	87	84	85	86	83	83	86	85	78	85	89	86	87	87	86	84.9
	Minimum	60	61	67	58	50	50	51	51	63	65	62	65	66	67	64	67	70	69	66	63	65	68	63	63	67	61	65	64	63	67	66	62.8
Creston	Maximum	91	90	85	85	88	89	93	93	83	89	91	96	92	95	93	78	85	86	89	87	86	89	92	89	89	90	95	93	92	94	91	89.6
	Minimum	64	63	66	55	54	54	55	56	63	66	63	67	67	68	64	68	67	69	69	70	69	67	62	66	65	64	67	64	64	65	67	64.1
Elkins	Maximum	86	86	77	75	77	83	86	87	78	85	89	87	86	88	83	77	74	86	87	89	83	82	89	82	72	84	89	87	88	89	84	83.7
	Minimum	61	58	61	59	52	51	51	53	61	63	62	63	63	64	70	66	68	67	63	60	64	64	59	60	64	66	64	62	64	59	65	61.5
Fairmont§	Maximum	92	91	84	83	83	86	91	95	83	93	93	97	93	94	96	81	79	81	95	97	89	90	88	87	80	93	97	90	95	96	91	89.8
	Minimum	62	62	64	59	56	54	54	56	62	66	64	67	68	69	69	69	71	70	68	63	68	68	67	66	69	64	67	66	64	72	69	64.9
Glenville	Maximum	95	94	93	88	89	93	96	97	92	95	97	97	98	99	94	90	88	88	93	95	92	92	93	91	93	95	98	95	97	99	96	93.9
	Minimum	62	63	66	54	55	55	54	56	63	65	62	66	68	68	69	60	70	71	67	70	68	65	64	66	65	65	69	65	65	63	68	64.1
Grafton	Maximum																																
	Minimum																																
Lost Creek	Maximum	88	88	81	80	82	85	90	90	80	89	91	93	93	94	91	81	80	78	90	92	87	85	88	90	82	90	94	90	92	93	89	87.6
	Minimum	60	59	63	55	50	48	49	51	62	65	60	64	65	67	68	69	70	72	66	63	66	67	65	63	64	60	63	64	65	68	65	62.5
Mannington	Maximum	86	87	80	78	81	82	86	88	79	86	88	90	88	88	89	79	79	79	87	88	83	85	86	86	80	87	91	89	87	89	87	85.1
	Minimum	59	59	60	54	49	48	50	53	60	63	61	64	65	66	64	66	70	68	65	61	64	66	64	63	63	59	64	64	61	61	66	61.3
Morgantown	Maximum	85	88	80	80	80	84	88	90	83	86	92	92	89	88	91	80	76	79	88	92	90	86	86	86	80	89	93	89	88	94	87	86.4
	Minimum	59	67	66	58	52	55	55	58	65	67	68	69	71	67	70	67	70	69	69	66	69	65	63	64	67	65	66	65	66	64	69	64.9
New Cumberland	Maximum	85	88	74	80	80	83	88	90	82	84	89	91	86	87	91	80	81	81	88	87	84	88	92	90	83	92	94	88	88	94	91	86.4
	Minimum	52	53	57	64	49	46	47	51	51	51	63	68	69	65	65	65	67	65	65	63	65	67	58	61	66	56	64	62	63	61	66	60.2
New Martinsville	Maximum	91	91	81	84	85	88	92	95	82	91	91	94	94	97	95	84	81	84	91	93	89	91	94	90	87	94	94	93	95	96	90	90.2
	Minimum	71	63	61	56	56	55	54	57	65	67	66	73	68	70	66	68	71	72	71	70	70	65	66	67	64	67	70	69	61	62	71	65.5
Parkersburg	Maximum	88	91	82	80	83	88	91	92	78	88	89	92	89	93	90	79	83	83	86	90	85	88	90	89	86	91	95	90	89	92	92	87.8
	Minimum	66	65	65	58	60	60	57	61	69	68	70	72	71	70	70	69	70	71	69	71	73	68	65	69	70	68	70	68	70	71	71	67.6
Parsons	Maximum	85	84	75	76	77	83	85	87	79	87	88	87	88	88	83	76	75	84	85	86	86	82	85	87	73	83	85	86	84	87	84	83.2
	Minimum	55	60	55	47	48	42	48	50	59	59	59	62	60	62	64	63	67	60	65	61	61	64	60	60	64	65	65	64	64	57	67	59.3
Philippi	Maximum	89	86	87	77	81	85	89	90	82	87	91	93	89	92	89	82	80	82	89	90	84	85	89	89	82	88	91	90	90	92	95	87.3
	Minimum	61	63	64	58	51	51	53	56	65	65	66	67	66	67	66	67	70	68	64	62	61	67	63	64	66	64	67	65	62	64	68	63.3
Pickens	Maximum	80	82	72	69	72	77	81	82	68	82	83	83	80	85	80	75	74	80	80	81	79	79	81	81	70	78	82	80	82	84	79	78.7
	Minimum	59	59	60	56	49	49	53	55	62	63	63	62	63	62	64	63	66	66	64	65	63	65	58	60	65	57	64	60	62	62	64	60.7
Terra Alta	Maximum	72	76	70	76	78	81	82	86	86	84	83	86	89	90	86	83	72	76	78	81	83	78	76	79	80	77	82	83	86	84	91	81.1
	Minimum	58	60	58	62	62	64	61	61	62	66	64	64	66	65	66	68	60	61	67	68	69	64	63	62	64	62	64	66	67	66	68	63.8
Wellsburg	Maximum	81	84	76	76	78	80	83	85	79	83	87	86	84	88	80	76	79	81	87	87	82	84	87	87	80	87	91	87	87	88	87	83.5
	Minimum	58	61	61	56	55	55	55	59	63	67	67	69	69	68	67	67	68	69	70	67	68	66	64	66	68	61	68	67	66	67	73	64.7
Weston§	Maximum																																
	Minimum																																
Wheeling§	Maximum	90	97	84	85	88	93	94	96	87	90	96	97	92	95	98	77	83	84	93	96	94	97	100	97	93	98	99	99	99	97	95	93.0
	Minimum	62	60	60	56	54	44	52	59	64	67	66	69	75	71	68	67	68	72	71	68	71	62	64	68	68	61	63	66	67	67	69	64.5
Southern Division.																																	
Beckley	Maximum	84	86	83	81	81	83	81	86	83	86	86	88	89	89	79	85	86	87	87	80	85	82	81	82	85	87	87	83	85	87	88	84.6
	Minimum	54	61	63	53	51	52	58	64	61	69	64	65	64	61	66	68	67	66	66	64	66	58	61	62	62	63	62	64	65	69	63	62.3
Bluefield	Maximum	85	84	80	75	81	83	83	79	69	....	81	84	86	85	....	85	85	85	86	85	83	83	84	84	....	84	86	.....	85	85	82.9
	Minimum	.....	.....	.....	.....	.....	.....	.....	60	64	....	61	64	65	67	....	65	65	66	66	65	61	64	59	63	....	64	62	.....	62	62	63.4
Charleston	Maximum	90	93	89	87	88	89	94	90	93	93	93	96	95	94	94	89	90	89	91	91	88	91	90	90	90	95	97	95	94	93	91	91.7
	Minimum	62	62	61	60	55	56	54	56	60	63	66	66	71	67	69	68	66	70	70	70	70	67	63	63	65	72	71	67	69	65	70	65.0
Elkhorn	Maximum	87	89	83	81	83	86	87	85	76	83	83	88	87	87	75	78	86	84	83	81	84	84	82	80	86	86	84	87	86	85	83	83.8
	Minimum	65	64	67	63	54	55	60	62	66	64	67	64	65	65	70	66	66	69	69	68	65	67	59	62	63	64	64	65	66	62	64	64.2
Green Sulphur Spgs.	Maximum	86	88	82	82	84	84	87	90	88	78	85	89	90	87	78	77	89	87	88	85	88	86	87	85	86	93	86	89	85	90	88	86.0
	Minimum	62	60	60	53	50	50	46	50	56	52	62	59	62	61	65	63	65	65	63	62	62	56	59	61	62	62	62	62	6.	62	55	63	59.1
Hinton§	Maximum	87	90	85	80	85	86	90	91	72	84	89	92	91	90	81	77	88	88	87	90	90	86	89	85	86	89	88	90	83	90	89	86.7
	Minimum	62	65	66	59	55	54	55	60	60	62	64	64	65	66	67	65	66	66	65	66	66	67	62	64	65	66	61	64	65	66	61	64	63.3
Holcomb§	Maximum	87	87	78	76	80	86	90	93	75	90	86	88	90	89	86	83	83	86	86	88	87	88	85	87	80	88	90	88	87	91	85	85.9
	Minimum	57	57	60	55	50	54	45	62	62	66	73	64	68	60	66	68	63	63	68	66	67	63	60	56	61	59	63	59	61	60	56	61.0
Huntington§	Maximum	90	91	88	83	85	88	93	89	78	86	88	91	91	93	84	86	90	92	83	92	87	92	94	93	86	91	93	92	91	95	92	89.3
	Minimum	70	69	69	60	53	59	59	65	67	66	68	70	70	70	71	71	72	71	71	71	71	69	65	68	69	69	70	67	70	67	70	67.6
Lewisburg	Maximum	83	87	78	76	82	84	88	86	72	80	84	89	88	80	85	74	84	85	85	87	88	83	88	79	79	84	85	85	82	88	84	83.3
	Minimum	58	60	61	57	50	49	54	59	61	61	62	61	62	61	63	64	65	63	62	62	63	65	59	62	65	60	63	64	66	58	62	60.7
Madison§	Maximum												95	93	93	87				92	86	88	89	91	....	90	92	94	91	90	95	....	91.1
	Minimum												....	70	68	68	70	....	....	68	70	70	63	64	....	66	68	67	67	67	64	....	67.3
Marlinton	Maximum	76	80	78	72	74	76	82	78	68	74	76	80	78	78	72	66	78	76	78	82	78	80	78	76	72	80	84	82	78	84	80	77.2
	Minimum	60	62	60	50	48	50	52	52	62	62	62	60	62	62	64	60	64	62	60	60	64	62	58	58	60	58	60	62	64	56	62	59.3
Point Pleasant	Maximum	91	92	87	85	88	90	94	95	80	91	92	95	94	94	92	85	90	88	85	91	93	91	95	92	91	92	99	95	92	94	94	91.2
	Minimum	65	64	67	55	52	53	52	55	68	65	64	69	68	67	64	68	68	69	68	69	68	64	59	61	64	67	67	64	65	64	67	64.0
Powellton	Maximum	90	92	84	86	87	89	9.	89	88	89	98	95	93	94	90	88	89	90	90	88	89	90	91	89	91	91	92	90	91	93	89	90.2
	Minimum	62	63	61	62	60	52	54	65	62	60	57	64	65	66	68	69	68	67	68	69	68	67	60	61	65	63	72	71	65	65	70	64.3
Robertsburg§	Maximum	93	91	85	84	89	92	95	91	81	95	92	93	93	93	89	85	87	90	89	92	88	89	92	96	93	93	94	94	94	95	93	91.0
	Minimum																																
Ryan	Maximum	86	90	85	80	80	87	92	90	85	88	89	91	95	94	87	82	93	91	87	90	85	87	88	90	91	90	95	93	91	89	9.	88.9
	Minimum	60	62	56	50	49	50	48	55	62	61	63	64	65	66	62	62	66	69	66	67	66	65	59	64	66	63	67	63	63	63	62	61.4
Spencer§	Maximum	88	90	86	80	87	80	86	88	79	89	93	94	91	94	89	83	85	89	88	89	85	89	87	89	88	89	90	89	89	90	90	87.8
	Minimum	61	60	65	59	49	52	50	56	62	64	60	65	66	65	60	67	64	70	62	67	56	67	60	66	67	63	64	62	63	60	62	61.5
Union§	Maximum	87	85	84	82	83	88	84	80	81	82	87	89	89	89	73	75	77	85	88	86	87	89	88	89	87	90	89	82	87	90	87	85.0
	Minimum	60	62	60	52	50	52	55	58	58	60	64	61	61	62	66	65	66	67	63	65	61	65	65	66	65	63	62	65	66	55	60	61.3
White Sulphur Spgs.	Maximum	83	83	77	76	78	79	83	80	75	76	80	79	84	81	76	78	78	80	81	82	82	81	83	75	77	84	83	82	81	84	82	80.1
	Minimum	52	58	61	54	50	50	53	58	61	67	59	62	62	62	52	56	54	58	61	53	65	66	61	63	65	62	59	65	68	57	64	59.3
Williamson§	Maximum	91	92	85	83	87	91	92	91	82	89	86	91	92	92	82	88	86	92	88	87	88	88	90	91	90	90	92	90	88	92	90	88.9
	Minimum	69	68	71	63	61	58	60	63	68	67	67	68	71	70	71	71	72	69	70	71	71	71	64	66	69	70	72	70	69	68	68	67.9

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

F

VE. Stacks OCT

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

AUGUST, 1916

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
SEPTEMBER 26, 1916

Departure of the Mean Temperature from the Normal, August, 1916.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXIV. PARKERSBURG, W. VA., AUGUST, 1916. No. 8.

GENERAL SUMMARY.

The month was characterized by long periods of warm weather, giving an average temperature considerably above the normal, and heavy and unfavorably distributed rainfall. The highest and lowest temperatures, however, were well within previous August records, and over the greater part of the agricultural portion of the State the rainfall was favorable for growth and harvesting. Cloudbursts caused great damage to property and crops in a few sections and the loss of more than thirty lives in the coal regions of Kanawha, Fayette, and Boone counties. At the close of the month corn was in excellent condition, the outlook for potatoes fair to good, and a good crop of late apples was in sight. A large crop of buckwheat was expected.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.04 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.26 inches on the 28th, and 29.85 inches on the 8th. Elkins, 30.28 inches on the 31st, and 29.77 inches on the 8th.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 72.9°. The mean departure from the normal for 40 stations having ten or more years of record was + 1.4°. The temperatures were continuously high, except the 13-15th, 23d-25th, and 28th-31st. The highest readings were recorded on the 7th, 21st, and 22d, as a rule, and the lowest on the 14th and from the 28th to 31st. Light frost occurred in a few of the more elevated sections on the 14th, when the morning temperatures ranged generally from 40° to 50°.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 86 per cent; 8 p. m., 75 per cent. The August averages for the same hours for the past 28 years are 82 and 69 per cent, respectively. Elkins, 8 a. m., 90 per cent; 8 p. m., 83 per cent. The August averages for Elkins for the same hours for the past 16 years are 91 and 81 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 60 stations reporting, was 4.76 inches. The departure from the normal for 43 stations having ten or more years of record was + 0.78 inch. The rainfall was heaviest over the southern counties and lightest over the eastern panhandle and Monongahela basin. The monthly amounts were especially light over the extreme eastern counties, where droughty conditions prevailed. Showery weather prevailed from the 4th to the 16th, with moderate to heavy rains in many sections on the 4th, 9th, 11th, 12th, and 16th. Cloudbursts on the 9th caused great damage and the loss of more than thirty lives in Kanawha, Fayette and Boone counties. The greatest loss occurred in Cabin Creek and along the Big and Little Coal rivers. Houses, bridges, and crops were washed away. The rainfall at Powellton, Fayette county, on the 9th was approximately 9 inches. Excessive rain on the 12th also caused much damage to crops in Pleasants and Tyler counties Light to moderate showers were quite general on the 21st, 22d, 23d, 27th, and 28th.

WIND.

The average wind velocity at Parkersburg was 3.8 miles per hour, or 0.4 mile below the August average for 26 years. The average at Elkins was 2.5 miles per hour, or 0.2 mile below the August average for 17 years. The highest velocity at Parkersburg was 28 miles per hour from the northwest on the 26th, and at Elkins 21 miles per hour from the west on the 4th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 49 per cent of the possible amount, or 9 per cent below the August average for 19 years. The average at Elkins was 55 per cent, or 4 per cent above the August average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 14th, 16th, 17th, 18th, 19th, 20th, 21st, 22d, 23d, 25th, 30th, and 31st; Bayard, 12th, 13th, 16th, 17th, 18th, 23d, 29th, and 30th; Dam No. 26, 18th, 19th, 20th, 21st, 30th, and 31st; Elkins, 11th, 13th, 14th, 17th, 18th, 19th, 20th, 21st, 22d, 24th, 25th, 30th, and 31st; Green Sulphur Springs, 24th, 25th, 26th, 27th, 28th, 29th, 30th, and 31st; Hinton, 1st, 17th, and 26th; Huntington, 18th and 30th; Mannington, 6th, 7th, 10th, 14th, 17th, 18th, 19th, 20th, 21st, 22d, 24th, 29th, 30th, and 31st; Marlinton, 17th, 18th, 20th, 21st, 24th, 25th, 30th, and 31st; Martinsburg, 17th; New Cumberland, 7th, 10th, 14th, 29th, 30th, and 31st; Nuttallburg, 15th; Parkersburg, 30th; Robertsburg, 19th, 21st, 30th, and 31st; Romney, 16th, 17th, 18th, and 29th; Rowlesburg, 11th, 14th, 17th, 18th, 20th, 21st, 22d, 24th, 25th, and 31st; St. Marys, 14th, 16th, 17th, 18th, 19th, 21st, 24th, 30th, and 31st; Wheeling, 10th, 14th, 17th, 18th, 19th, 24th, 29th, and 30th.

Frost, light: Bayard and Davis, 14th.

Hail: Bayard, 4th and 21st; Marlinton, 22d; Parsons, 20th; Romney, 13th; Wheeling, 26th.

An aurora was observed during the evening of the 26th.

Thunderstorms (dates and number of stations reporting): 1st, 5; 3d, 5; 4th, 10; 5th, 8; 6th, 5; 7th, 6; 8th, 10; 9th, 3; 10th, 1; 11th, 11; 12th, 1; 13th, 1; 15th, 1; 19th, 2; 20th, 3; 21st, 5; 22d, 6; 23d, 4; 25th, 2; 26th, 8; 27th, 4; 28th, 6.

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	69.8	..	...	5.48	....	....	....	..	..	..
1892	72.1	96	41	2.55	....	....	....	..	..	..
1893	70.8	98	41	3.38	....	....	....	..	..	..
1894	71.5	103	38	2.07	5.15	0.27	....	14	12	5
1895	73.3	104	40	3.01	7.69	1.15	....	15	11	5
1896	72.6	97	40	2.82	5.69	0.88	....	15	12	4
1897	70.9	100	42	2.91	5.93	0.77	....	13	14	4
1898	73.7	96	44	7.51	11.57	4.40	....	12	12	7
1899	73.5	100	34	2.64	6.37	0.34	....	15	11	5
1900	76.0	100	45	3.15	7.20	1.03	....	17	10	4
1901	73.6	98	43	5.14	13.70	1.64	....	10	13	8
1902	70.4	98	35	2.40	6.05	0.97	....	15	13	3
1903	71.4	105	38	2.64	5.85	0.99	....	12	13	6
1904	70.7	95	32	2.88	6.71	0.67	....	15	10	6
1905	71.3	96	40	4.25	8.32	1.32	....	14	11	6
1906	75.4	98	47	5.15	10.72	2.18	....	10	13	8
1907	69.4	93	41	4.64	10.12	1.55	....	13	10	8
1908	70.9	101	37	2.82	5.63	0.84	....	15	10	6
1909	70.8	99	37	3.03	5.79	0.81	....	16	10	5
1910	70.8	98	39	2.03	5.58	0.70	....	17	10	4
1911	73.5	105	40	6.71	12.14	2.38	....	13	10	8
1912	69.3	95	35	3.64	11.70	0.25	....	10	13	8
1913	72.7	102	37	3.18	8.20	0.79	....	19	7	5
1914	71.8	100	40	4.86	9.29	1.38	....	15	9	7
1915	69.4	99	36	4.84	8.36	2.46	....	10	11	10
1916	72.9	104	40	4.76	15.35	1.46	....	14	9	8
Means and Extremes..	71.9	105	32	3.79	15.35	0.25	....	14	11	6

Climatological Data for August, 1916.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	66.5	+0.7	85	5†	41	14†	35	4.96	+0.43	2.30	0.0	13	11	12	8	w.	G. C. Dixon.
Brandywine	Pendleton	0	0	71.0		94	22	40	14†	42	1.90		0.48	0.0	10	20	6	5	sw.	Elmer Keister.
Burlington	Mineral	875	22	73.6	+2.5	96	22	16	14	39	1.47	−2.15	0.42	0.0	8	10	20	1	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27								3.60	−0.24	1.70	0.0	4				e.	S. W. Lightner.
Lost City	Hardy		10																	B. D. Hinegardner.
Martinsburg	Berkeley	435	24	75.0	+2.0	99	22	51	29	37	1.56	−2.33	0.53	0.0	8	23	7	1	n.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	76.1[e]	+3.4	103[c]	22	45[c]	14	46[c]	1.46	-1.77	0.48	0.0	8	24[e]	1[e]	1[e]		M. S. Henkel.
Piedmont	Mineral	919	0	72.4		98	22	44	29	40	1.76		0.72	0.0	7	16	12	3	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	19	74.7	+2.0	98	22	45	14	43	2.66	−1.29	1.05	0.0	7	9	20	2		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	71.8[a]	+0.8	93[a]	22	42[a]	14	40[a]	1.81	−2.33	0.54	0.0	6	26	5	0	w.	J. M. Mallow.
Averages and	Extremes			72.6	+1.9	103[c]	22	40	14†	46[c]	2.35	-1.38	2.30	0.0	8	17	11	3	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	74.8	+1.2	95	19	52	14	30	5.24	+1.87	2.21	0.0	8	22	8	1		J. D. Riggs.
Brandonville	Preston	1,809	6								4.64		1.00	0.0	10					W. T. Miller.
Buckhannon	Upshur	1,411	20	71.4	+1.4	92	4	46	14	32	3.56	−0.42	0.92	0.0	10	21	5	5		H. A. Darnall,
Cairo	Ritchie	674	14																	Van A. Zevely.
Central Station	Doddridge	950	19								4.93	+1.93		0.0						D. H. Doak.
Cheat Bridge	Randolph	3,600	4								4.46		1.75	0.0	15					Walter Cole.
Cortland	Tucker	3,300	1								4.21		1.40	0.0	8					Samuel Harmon
Creston	Wirt	701	15	75.1	+2.0	96	21	49	14†	37	3.44	+0.32	1.15	0.0	10	17	7	7	sw.	J. M. Reed.
Davis	Tucker	3,093	8								7.80		2.15	0.0	15	16	5	10	sw.	Ross C. Male.
Elizabeth	Wirt	646	5								2.38		0.83	0.0	6					E. D. Ball.
Elkins	Randolph	1,940	16	70.3	+1.9	90	5	46	14	35	3.13	−0.52	1.37	0.0	12	7	8	16	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	11	74.9	+2.3	97	20	49	14	41	4.18	+0.74	1.10	0.0	9	22	3	6	w.	F. P. Hall.
Glenville	Gilmer	738	23	78.0	+4.7	99	22	52	29	38	3.76	−0.17	1.25	0.0	6	17	10	4	w.	M. T. Brannon.
Grafton	Taylor	1,000	24																	Joseph Gerken.
Lost Creek	Harrison	1,026	19	73.0	+2.5	93	20	45	29	42	3.72	−0.41	1.37	0.0	8	20	8	3	w.	Allen Smith.
Mannington	Marion	974	14	71.4	+0.5	90	21	45	14	34	5.06	+1.72	1.55	0.0	13	13	14	4	w.	Jas. A. Morgan.
Morgantown[a]	Monongalia	1,250	24	74.3	+2.2	91	4†	46	14	36	3.67	−0.43								Prof. Edgar L. Andrews
Moundsville ††	Marshall	642	14	75.8	+3.3	97	21	49	14	40	3.59	+0.76	0.95	0.0	8	26	1	4		M. Z. White.
New Cumberland	Hancock	987	19	71.9	+1.2	99	21	41	29	39	3.07	−0.18	1.04	0.0	10	13	15	3	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	75.8	+1.8	95	6†	51	14	34	5.48	+2.27	2.12	0.0	9	20	7	4	s	Wm. Ankrom,
Parkersburg	Wood	638	28	75.2	+1.9	94	21	53	29	31	2.41	−1.12	0.87	0.0	8	10	14	7	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	69.2	+0.1	87	3	48	14†	32	6.05	+2.41	1.95	0.0	5	16	9	6		J. W. Swisher.
Philippi	Barbour	1,149	20	73.4	+1.8	97	21	46	14†	38	5.78	+1.74	1.35	0.0	11	10	20	1	w.	Okey J. Robinson.
Pickens	Randolph	2,697	14	67.2	+0.3	83	3†	43	14	30	4.34	−0.65	2.37	0.0	11	13	12	6	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30								2.98	−0.81	0.96	0.0	8					J. F. Pierce.
Saint Marys	Pleasants	577	8								10.79		3.95	0.0	9				w.	Wm. Hughes.
Smithfield	Wetzel	835	11	72.3	+1.2	92	21	43	15	35	6.01	+1.95	1.32	0.0	12	14	11	6	nw.	G. M. Whisler.
Terra Alta	Preston	2,612	16	68.0	0	86	1	42	14	28	6.93	+2.23	1.15	0.0	11	19	6	6	w	C. F. Dodge.
Wellsburg	Brooke	1,225	16	72.0	+2.1	93	21	49	14	26	3.72	+0.17	1.12	0.0	12	15	14	2	sw.	C. P. Waugh.
Weston	Lewis	1,026	21																	Miss C. M. Davis,
Wheeling	Ohio	645	30	77.0		104	21	49	14	39	4.79	+1.87	1.53	0.0	13	23	4	4	s.	Miss M. B. Forsyth.
Averages and	Extremes			72.9	+1.6	104	21	41	29	42	4.73	+0.71	3.95	0.0	10	16	10	5	w.	
Southern Division.																				
Bancroft	Putnam	574	12	73.9[e]	+0.1	93[e]	7	50	14	28[e]	6.15	+1.67	0.98	0.0	13	7	0	24	ne.	R. E. Dent.
Beckley ††	Raleigh	2,440	16	71.2	+1.7	89	3†	45	25	39	7.49	+4.07	1.95	0.0	9	12	6	13	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	71.4	+0.1	86	7	46	25	34	2.81	-1.61	1.00	0.0	8	13	5	13		Norfolk & Western Ry
Charleston	Kanawha	597	13	77.4	+2.1	96	7	53	14†	37	5.31	+1.02	1.75	0.0	9	5	2	24	w.	C. V. Lewis.
Clay	Clay	706	0								4.12		1.50	0.0	6					Prof. E. H. Knabenshue
Cuba	Jackson	650	14	74.1	+2.3	94	3	47	29	36	4.98	+2.06	0.93	0.0	10	9	21	1	w.	C. T. Perry.
Dam 22 O. R.	Jackson	538	1								4.79		0.96	0.0	12					U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0								4.10		1.20	0.0	11					U. S. Engineer Office.
Dunlow	Wayne	703	8								11.70		2.40	0.0	14	14	1	16	w.	James W. Damron.
Elkhorn ††	McDowell	1,933	23	72.4	+1.3	87	7	51	14†	28	3.57	−0.11	0.68	0.0	10	11	17	3	w.	J. J. Lincoln.
Evans	Jackson	606	0								4.05		1.05	0.0	12	14	0	17		B. F. Sayre.
Green Sulphur Spgs	Summers	1,600	20	72.6	+1.1	90	6†	48	14	34	5.26	+2.10	1.70	0.0	9	12	5	14	e.	W. H. Gwinn.
Hinton	do	1,450	19	73.8	−0.2	93	11	53	14†	31	6.81	+3.10	1.78	0.0	14	8	1	22	ne.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	70.2		90	19	45	25	38	4.73		2.30	0.0	11	11	5	15		R. E. Ferguson.
Huntington	Cabell	538	20	75.6	+1.0	94	5†	52	15	30	5.48	+1.78	1.58	0.0	12	11	3	17	w.	L. H. Hutchinson.
Lanes Bottom	Webster	2,062	0								6.01		1.77	0.0	12	17	1	13	sw.	C. A. Droddy.
Lewisburg	Greenbrier	2,200	16	71.6	+1.1	90	7†	45	14	35	4.74	+1.29	1.11	0.0	12	10	17	4	nw.	Geo. T. Argabate.
Logan	Logan	687	13																	W. H. Oliver, Jr.
Madison	Boone	704	10	75.6[e]		93[e]	5†	55[e]	15†	33†	8.54		3.20	0.0						S. E. Bradley.
Marlinton	Pocahontas	2,131	17	67.2	−0.5	88	5	44	14†	28	4.78	+0.40	1.94	0.0	14	5	19	7	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23	65.9		82[e]	21	47	14	26[e]										Miss Donna Tully.
Point Pleasant	Mason	553	23	75.8	+1.1	96	7†	48	14	36	4.10	+0.87	1.21	0.0	11	12	6	13	sw.	W. D. Holmes.
Powellton [e]	Fayette	933	20	74.9	+2.1	95	11	51	14†	38	15.35	+11.76	9.00x	0.0		14	8	4		S. C. Lampert,
Renick ††	Greenbrier	1 653	0								3.00		1.30	0.0	10				se.	Wm. B. Hill.
Robertsburg	Putnam	574	16	76.0[d]	+1.7	95	3†	50[d]	14†	36[d]	2.20	−1.24	0.43	0.0	11	6	5	20		E. C. Brace, Jr.
Ryan	Roane	700	13	73.8	+2.0	93	21	47	28	31	4.42	+0.52	1.35	0.0	11	11	11	9		Wm. E. Ryan,
Spencer	do	784	12	72.5	+0.2	94	19	41	31	47	4.14	+0.78	0.70	0.0	10	5	22	4		A. M. McKown.
Sutton	Braxton	839	10																	Ben Gillespie.
Union	Monroe	2,250	12	71.4[a]	+1.0	90[a]	21	46	14	38[a]	7.49	+3.87	1.65	0.0	11					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	69.6		85	6†	46	14†	29	4.96		1.24	0.0	12	18	5	8	w.	J. M. Ayres.
Williamson	Mingo	660	16	76.9	+1.9	93	7	59	25	28	4.64	+0.70	2.00	0.0	12	14	8	9	w.	J. F. Keyser.
Averages and	Extremes			73.0	+1.1	96	7†	41	31	47	5.67	+1.82	9.00x	0.0	11	11	7	13	w.	
State Averages and	Extremes			72.9	+1.4	104	21	40	14†	47	4.76	+0.78	9.00x	0.0	10	14	9	8	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

x Approximated by the observer.

Daily Precipitation for August, 1916.

Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac				2.30	.01	.81		.01	.08		.15	.13	.08			.37					.45	.03	.26				T.	.28				4.96
Brandywine	do				.43	.27	T.	.07	T.	.25	.01	T.	.10	.07			.22					T	.47	.01									1.90
Burlington	do			.27		.16		T	.09		T.			.42			.08					.10	.15					.20				1.47
Harpers Ferry ‖‖	do					1.30		T.							.30										1.70			.30				3.60
Lost City	do																															
Martinsburg	do				.20	.05		.05		.03		T.		.22			.20							.28					.53				1.56
Moorefield	do		.10			.15		.30		.12				.48			.10					.10		.11									1.46
Piedmont	do			.35		.30		.07			.08						.72							.01					.23				1.76
Romney	do			.32			1.05	T	.10			.11		.34		.14						T.	T.					.60				2.66
Upper Tract	do				.54		.27							.22	T.							.18		T.			.50		.10			1.81
Northern Division.																																	
Bens Run	Ohio				.25				.51			2.21		.33										.03			.53	.30	1.08				5.24
Brandonville ‖‖	Monongahela	.25			.29	.28	.98		.35	.57			.35	.36			T.											.21	1.00				4.64
Buckhannon	do				T.	.25	.70	T		.50		.92	.04	.04		T.	T					.30		.19				.07	.55				3.56
Cairo	Little Kanawha																																
Central Station	Middle Is. Creek					.87			.24			2.06		.11												*	*	*	*	*	1.65		4.93
Cheat Bridge ‖‖						1.75	.25	.18		.08	.22	.38	.34		.21		.30	.06			.03		.05		.03	.27				.31		4.46
Cortland ‖‖	Monongahela					.33	.34			.18			.34	1.40		.44							.80					.38				4.21
Creston ‖‖	Little Kanawha					.43	.27			.65		.31	.84	T.	T.		.05						.04		.05		.50	.30	T.			3.44
Davis ‖‖	Monongahela	.02			.02	.51	1.60	.19	T.	.56			.45	1.01	.07		.55						2.15	.05	.20			.04	.38				7.80
Elizabeth ‖‖	Little Kanawha					.31				.30		.22	.85															.21	.51				2,38
Elkins ***	Monongahela	.01			.46	1.02	.22	T.	.16	T.		.46	T.	.24		.09	.03					.01		.03			T.		.40				3.13
Fairmont ‖‖	do	.07			T.	.08	1.10	T		1.08			.67	.06									.35		T.			.32	.45	T.			4.18
Glenville ‖‖	Little Kanawha					.28	.84			.58			1.25	.26														T	.55				3.76
Grafton	Monongahela																																
Lost Creek	do				.14	.20	.59		.57			1.34	.03	.28			T.			T.		T.		T.				T.	.57				3.72
Mannington	do	.31			.04		1.55		.35	.20		1.10	.01	.11								.09		.20			.25	.32	.53				5.06
Morgantown	do	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.00						.24	.03	.54			.33	.11	.42				3.67
Moundsville ‖‖	Ohio	.43			.13		.52			.60		.95		.20														.35	.41				3,59
New Cumberland	do	1.04				.53			.17			.07		.06								T.	.47	.07	T.	T.	.13	.10	.43				3.07
New Martinsville	do				.50	.02			.65			2.12		.52										.02			.55	.28	.82				5.48
Parkersburg ***	Ohio				.04	.05		T.	.54	T.		.55	T.	.12		T.				T				T.			.18	.48	.45				2.41
Parsons	Monongahela				T.		1.95	T.	.15				1.05	.95	T.	T.					1.95		T.										6.05
Philippi	do					.90	1.35		.22	.47		.90	.34	.29			.10						.63				.08	.50				5.78
Pickens	do				.20	.24	.10		.09	.50		2.17	.20	.23			11					T.		.20					.30				4.34
Rowlesburg ‖‖	do	T.			.52	T.	.08		T.	.62			.24	.12	T.		T.	.16					.96				T.	.28				2.98
Saint Marys ‖‖	Ohio					2.38	T.			1.25		.22	3.95	1.03	T.	T.	T.	T							.03	T.		.60	1.30	.03	T.	T.	10.79
Smithfield ‖‖	Fishing Creek	.50			.15	.42	1.08		.04	.78			1.32	.40											.03		T.	.59	.68	.02			6.01
Terra Alta	Monongahela				1.45	1.36			.45	.35		.38	1.30	.22								.24	.40				.48	.30					6.93
Wellsburg	Ohio	.40				.37			.08			.04					.05						1.12	.25		.15	.80	.06	.40				3.72
Weston ‖‖	Monongahela																																
Wheeling ‖‖	Ohio	1.37				T.	.15			.25			.21	.15				.22			T.		.25	.06	.24		.01	1.53	.34	.01			4.79
Southern Division.																																	
Bancroft ‖‖	Great Kanawha	.28				.98	.58			.42		.35	.28		.05		.39	.06			.76			.90			.20	.90					6.15
Beckley	do					1.34			.28			.70	1.19	.41		1.95	.89						.08								.65	7.49
Bluefield	do	.23	1.00		.12						.35		.23	.12		.70	.06															2.81
Charleston ‖‖	do					1.75	T.	T		1.01	T.		.60	T.	.25		.25						.43	T.	.25		.12	.65	T.			5.31
Clay ‖‖	do					.90			.30	1.60			.82											.30				.20				4.12
Cuba	Sand Creek	T.			.55	.38			.60			.93	.70	.19	T.					T			.70	T.			.15	.15	.63				4.98
Dam 22 O. R. ‖‖	Ohio	.05				.90	.40		T.	.96		.05	.28	.77				.13			.32			.10				.20	.63				4.79
Dam 26 O. R. ‖‖	do					.28	.45			1.20			.10	.58		.20					.47				.21			.03	.49	.09			4.10
Dunlow	Big Sandy				1.75	.40	.10	.14			1.45	.17	.02		1.70	1.00	2.40			1.60	.76		.04			.17							11.70
Elkhorn	do		.68			.46	.29		.13	.21	.16		.40	.47		.25	.52						T.	T.	T.							3.57
Evans	Ohio				.22	1.03		.05	.82	.52		.54		.14			.06				.17			.09				.09	.52				4.05
Green Sulphur Spgs.	Great Kanawha	.52				.40				.45			.85			.53	1.70	.30				.20	.31										5.26
Hinton ‖‖	do		1.50	.08		.20	.10		.22	.01	.50		.72	.14	.36		1.78	.50		T.				.52						.18			6.81
Holcomb	do	T.			.40	.06	.15		*	2.30		.65		.16		*	.78							.15				.08					4.73
Huntington ‖‖	Ohio					.50		.30		1.32	.26	T.	.20	.74	.18	T.	.46	.10			.40			T.	.70				.32	T.			5.48
Lanes Bottom ‖‖	Great Kanawha	T.			.33	.88		.85	.92	.43		1.00		.70		.30	.22			.01				.15				.22					6.01
Lewisburg	do	.99			.58				.12	.35		.35		.27		.13	1.11			.08			.23						.51	.02			4.74
Logan	Guyandotte																																
Madison ‖‖		.15				1.30				*	*	3.20		.70	.15		*	2.36										.30	.35	.03			8.54
Marlinton	Great Kanawha	1.94			.06		.26	.32	.36	.39	.01	.44		.38		.12	.24			.04		T.	.06						.16				4.78
Nuttallburg	do									1.80		.90	T.	1.20		.30	.50						.56	.01					T.			†††
Point Pleasant	Ohio					.64	.64			.48		.10	.35				.14				.37				.10			.11	1.10	.07			4.10
Powellton	Great Kanawha	.45			2.60	.55				9.00							1.55						1.00	.20									15.35
Renick ‖‖	do		1.30			.30	.80	1.20		.30	.11		.25				.40	T.						.10	.30								5.06
Robertsburg ‖‖	do					.19	.43		.05	.12		.26	.10				.28				.08			.42			.12	.15					2.20
Ryan	do	.02			1.21	.38		T.	.06	.28		1.35	.30	.32		.11	.32			T.			T.				.07						4.42
Spencer ‖‖	Little Kanawha				.15	.30	T.	T		.70	.55	.15	.55	.34		.50										.30	.60						4.14
Sutton ‖‖	Great Kanawha																																
Union ‖‖	do	1.65			.30		1.65			.30	.27		.62	.35		.40	1.50			.10									.35				7.49
White Sulphur Spgs.	do	1.24			.32			.37	.36	.58	.04	T.	.40	.26		.11	1.00			.02			.32										4.96
Williamson ‖‖	Big Sandy						.10	.04		.30	.49		1.10	.08	.22	.26	2.00	.01							.01			.03				4.64

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for August, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum...	76	74	83	84	85	81	85	84	79	80	79	78	65	74	74	76	82	81	82	83	84	84	79	69	80	79	80	69	75	79	82	78.9
	Minimum...	63	52	52	60	58	65	63	64	55	53	54	56	57	41	45	61	52	55	52	54	52	62	54	52	54	53	52	49	41	44	51	54.1
Brandywine	Maximum...	78	77	86	88	91	89	91	90	87	88	87	89	82	79	81	83	88	87	87	89	91	94	84	80	84	86	85	80	72	83	86	85.2
	Minimum...	64	57	57	67	59	58	66	68	69	65	57	63	59	40	40	65	63	55	54	54	58	61	60	55	47	44	54	54	53	53	46	56.9
Burlington	Maximum...	84	79	86	84	90	88	91	92	86	90	90	90	74	78	80	72	83	87	89	92	92	96	88	82	84	93	90	81	84	89	87	86.2
	Minimum...	65	58	54	64	62	72	73	72	70	58	70	69	65	46	52	65	59	62	61	55	64	63	62	50	49	54	57	58	58	60	64	61.0
Martinsburg§	Maximum...	85	84	85	87	90	90	93	96	90	88	81	91	77	81	84	76	88	90	91	92	96	99	89	80	90	92	92	71	75	82	89	86.9
	Minimum...	71	63	59	65	67	70	73	74	73	63	66	70	60	52	57	65	61	59	60	65	68	68	67	59	55	55	62	65	51	55	57	63.1
Piedmont	Maximum...	86	82	88	83	90	90	95	92	88	92	91	89	80	86	84	75	90	94	90	96	95	98	86	74	82	84	82	70	70	78	85	86.0
	Minimum...	61	58	57	65	62	69	72	72	69	57	63	70	57	46	53	64	61	54	60	57	64	64	65	50	49	51	56	53	44	50	49	58.8
Romney	Maximum...	91	87	90	87	92	92	95	94	89	89	90	89	85	80	84	86	84	92	90	93	96	98	90	80	93	91	90	90	78	83	90	89.0
	Minimum...	68	67	55	65	58	72	72	75	70	58	65	70	59	45	53	56	55	54	60	53	66	65	64	70	50	60	58	57	47	52	53	60.4
Upper Tract	Maximum...	81	77	86	86	90	89	91	90	88	87	88	..	81	80	80	80	87	90	88	90	89	93	84	83	89	86	85	85	76	78	88	85.5
	Minimum...	65	56	55	65	59	68	67	68	69	60	57	..	59	42	50	65	59	53	55	54	60	60	53	53	52	56	45	58	59	60	57	58.0
Northern Division.																																	
Bens Run	Maximum...	90	84	84	86	90	93	92	83	90	90	85	87	76	76	76	87	92	91	95	90	92	91	81	81	86	86	79	73	77	78	86	85.4
	Minimum...	70	66	61	70	70	72	74	69	70	63	70	70	61	52	58	62	64	68	70	70	69	71	65	54	57	64	60	56	54	55	56	64.2
Buckhannon	Maximum...	82	83	85	92	87	87	87	83	85	84	85	84	72	75	77	81	85	84	84	86	87	86	79	73	82	83	81	69	73	77	80	81.9
	Minimum...	65	61	57	65	65	64	68	70	69	66	66	70	55	46	53	67	60	59	62	59	69	65	67	57	50	58	58	54	50	55	54	60.8
Creston	Maximum...	90	82	93	88	90	93	95	86	89	90	91	84	78	80	75	87	92	92	95	95	96	93	84	82	88	90	85	75	77	86	88	87.4
	Minimum...	67	64	58	65	67	70	70	72	69	69	71	70	65	49	55	65	62	65	68	67	67	69	66	55	52	58	60	57	49	55	51	62.8
Elkins	Maximum...	82	77	86	88	90	88	88	82	83	85	84	83	72	76	76	80	87	87	85	89	87	88	78	73	82	85	82	68	73	78	84	82.1
	Minimum...	63	63	61	63	63	68	66	68	65	63	63	66	50	46	50	63	61	59	59	59	60	64	61	52	47	55	56	49	49	54	49	58.5
Fairmont§	Maximum...	89	90	92	93	93	94	94	90	89	92	84	87	77	82	81	87	94	93	89	97	96	94	79	82	89	90	85	71	76	85	92	87.9
	Minimum...	69	62	59	64	67	70	71	74	70	62	66	71	64	49	52	61	63	61	64	63	66	66	69	56	54	60	58	54	50	54	51	61.9
Glenville	Maximum...	95	94	93	97	95	96	97	94	90	94	93	87	89	83	79	90	96	97	97	97	98	99	94	84	91	92	94	89	82	86	91	92.0
	Minimum...	68	62	65	66	67	70	71	71	69	69	69	70	69	53	56	65	65	67	69	69	68	71	67	59	53	58	61	57	52	56	54	64.1
Grafton	Maximum...																																
	Minimum...																																
Lost Creek	Maximum...	85	83	91	89	90	89	92	87	90	89	87	86	78	80	77	86	91	90	91	93	92	91	80	81	86	88	85	84	77	83	88	86.4
	Minimum...	66	65	55	65	64	68	65	67	61	64	64	69	65	47	49	65	59	58	63	61	63	64	64	57	51	56	57	49	45	53	46	59.5
Mannington	Maximum...	83	84	87	87	88	87	88	85	83	85	81	83	78	75	76	80	87	86	87	88	90	89	81	75	83	85	78	74	73	79	83	82.8
	Minimum...	66	57	57	64	64	67	70	71	69	59	64	68	61	45	51	62	60	58	66	63	63	65	64	53	51	58	56	54	46	55	49	59.9
Morgantown	Maximum...	85	88	90	91	89	91	91	91	86	87	85	86	....	82	79	90	90	84	89	91	91	91	86	86	84	86	80	75	75	81	87	86.2
	Minimum...	63	63	68	68	67	68	70	71	69	59	69	70	....	46	64	59	62	67	65	65	67	66	62	55	59	62	60	52	48	56	52	62.4
New Cumberland	Maximum...	82	84	90	89	90	90	95	85	85	89	88	86	74	80	80	85	90	92	94	93	99	92	80	82	85	88	79	71	74	85	88	85.9
	Minimum...	63	56	58	66	65	65	69	70	61	51	62	62	55	46	53	55	53	57	60	64	63	64	62	47	57	59	59	50	41	46	56	57.9
New Martinsville	Maximum...	88	84	94	87	90	95	94	91	90	91	85	87	82	79	76	87	90	91	92	92	95	92	86	82	87	86	81	79	80	84	87	87.2
	Minimum...	70	61	60	68	68	71	73	71	71	63	68	71	64	51	55	65	63	65	69	70	68	70	66	56	67	64	60	56	52	56	65	64.4
Parkersburg	Maximum...	86	82	94	84	89	94	92	85	85	89	92	86	75	78	74	85	91	90	92	87	94	91	78	80	86	88	80	70	76	82	85	85.2
	Minimum...	72	67	63	72	73	73	76	71	71	66	71	73	60	53	59	65	65	67	71	70	67	72	63	53	63	64	63	55	53	56	55	65.2
Parsons	Maximum...	81	81	87	86	85	85	86	86	82	82	82	81	75	76	77	83	84	81	86	86	85	79	71	79	82	80	65	67	76	75	81	80.4
	Minimum...	63	56	55	65	62	69	66	68	64	58	60	65	54	48	63	60	57	57	54	55	58	62	55	55	57	55	60	54	48	48	51	58.1
Philippi	Maximum...	85	85	89	90	85	90	90	90	86	89	86	85	80	76	79	88	88	89	85	90	97	85	87	86	84	88	79	78	84	87	84	85.9
	Minimum...	66	59	60	62	63	68	70	69	67	66	66	70	61	46	52	66	59	61	64	61	66	66	63	58	55	62	60	52	46	56	52	61.0
Pickens	Maximum...	76	72	83	82	83	80	82	77	77	78	79	75	70	71	68	75	79	80	78	82	80	82	74	69	75	78	77	64	67	72	78	76.2
	Minimum...	65	62	59	63	63	65	65	66	65	65	63	65	55	43	51	64	57	59	59	56	61	63	60	54	48	54	57	49	53	51	48	58.3
Terra Alta	Maximum...	86	77	78	82	77	81	83	83	82	78	77	77	77	70	72	74	77	72	75	78	76	79	75	76	73	76	74	72	70	76.7
	Minimum...	61	59	60	61	58	66	63	60	61	58	62	64	62	42	52	62	61	58	60	61	62	60	63	63	62	61	60	58	56	53	50	59.3
Wellsburg	Maximum...	80	80	86	85	87	87	89	84	80	84	82	81	71	72	76	79	85	87	90	90	93	88	82	75	80	81	74	68	71	77	81	81.5
	Minimum...	64	62	60	70	67	67	71	71	64	68	67	70	57	49	56	59	60	67	67	68	68	69	63	50	61	64	61	53	51	53	59	62.5
Weston§	Maximum...																																
	Minimum...																																
Wheeling§	Maximum...	91	91	96	93	94	99	98	89	95	96	90	94	85	87	85	91	94	94	98	96	104	98	75	87	92	92	84	80	84	91	94	91.5
	Minimum...	68	62	61	64	69	71	72	76	67	61	64	71	62	49	52	58	62	64	64	68	68	68	71	52	53	63	59	54	54	54	56	62.5
Southern Division.																																	
Beckley	Maximum...	87	80	89	84	83	86	81	87	87	82	85	87	86	80	78	83	86	86	85	86	88	89	78	78	84	84	83	74	78	74	83	83.3
	Minimum...	67	58	65	64	66	67	68	68	66	66	68	68	48	51	65	64	62	62	61	60	60	60	50	47	45	46	48	56	53	48	54	59.1
Bluefield	Maximum...	85	70	84	79	82	82	86	83	78	81	84	84	80	80	74	78	84	84	84	85	83	85	80	79	80	82	83	83	83	82	83	81.6
	Minimum...	67	62	60	64	64	68	67	67	69	65	65	66	66	48	64	69	63	62	61	60	58	64	63	58	46	51	56	61	56	55	51	61.2
Charleston	Maximum...	89	85	94	89	95	93	96	93	91	92	94	92	90	88	86	89	93	93	95	92	95	92	88	85	90	91	90	88	85	81	89	90.4
	Minimum...	62	61	63	68	63	68	70	69	71	70	70	70	69	53	55	61	69	72	72	71	68	70	70	63	53	60	63	60	53	55	57	64.5
Elkhorn	Maximum...	81	80	84	83	81	86	87	85	83	78	85	84	73	79	79	78	85	86	86	85	85	85	80	78	79	82	82	81	72	77	82	81.6
	Minimum...	61	67	62	66	65	69	69	69	71	68	66	68	67	51	67	70	67	65	63	62	59	67	65	60	51	56	57	60	61	57	54	63.2
Green Sulphur Spgs.	Maximum...	86	71	88	87	87	90	90	88	85	88	90	86	82	80	79	84	87	86	86	89	90	88	86	84	86	82	86	88	86	84	86	85.6
	Minimum...	63	61	56	61	63	64	69	65	65	62	63	63	58	48	60	62	62	61	60	63	60	72	60	56	54	51	57	62	52	54	56	59.7
Hinton§	Maximum...	87	73	88	88	86	91	92	90	74	90	93	88	83	78	78	78	89	88	85	87	88	89	86	89	83	86	87	73	69	81	84	84.5
	Minimum...	67	63	61	67	65	67	69	69	70	67	69	67	66	53	53	64	66	66	66	64	64	64	65	58	54	55	58	62	58	59	56	63.0
Holcomb§	Maximum...	85	73	88	88	87	89	88	83	78	85	86	84	78	78	76	80	88	86	90	85	87	88	78	75	81	83	86	72	68	79	84	82.5
	Minimum...	66	60	56	60	59	63	67	63	66	65	62	66	64	46	52	63	61	57	57	60	56	63	61	56	45	50	52	54	52	50	46	58.0
Huntington§	Maximum...	82	87	93	86	94	89	94	88	83	88	92	82	76	78	73	84	85	89	91	89	91	90	71	80	88	86	85	69	75	83	86	84.7
	Minimum...	71	70	65	72	72	74	73	74	72	74	75	72	72	56	52	64	68	69	69	70	70	70	70	59	59	62	65	58	54	57	56	66.6
Lewisburg	Maximum...	82	69	85	85	86	89	90	87	75	84	87	85	78	77	77	78	85	84	81	85	87	90	79	74	81	87	84	73	63	77	83	81.5
	Minimum...	64	64	61	64	63	67	69	68	68	63	63	67	65	45	62	67	63	60	58	61	60	66	63	54	46	55	55	56	56	54	48	60.5
Madison§	Maximum...	88			92	93					93	91	90	90	80		90		91	91	90							90	88	71	78		87.9
	Minimum...	66	64			65	73					66	68	70	60	55		66		64	65	64			55	58	58	58	58				63.2
Marlinton	Maximum...	74	72	80	82	88	86	82	80	82	80	78	80	72	72	68	74	82	78	74	82	83	84	80	68	72	74	76	68	66	72	74	76.9
	Minimum...	62	60	60	64	60	64	64	66	64	62	60	64	60	44	50	60	60	58	59	58	59	60	58	50	44	52	60	52	46	52	47	57.4
Point Pleasant	Maximum...	91	86	95	87	93	95	96	91	87	93	94	87	83	80	70	89	91	95	95	91	96	93	83	82	89	91	86	72	83	85	88	88.3
	Minimum...	69	64	61	70	71	70	71	71	69	67	71	69	66	48	57	66	64	65	68	65	65	67	67	65	56	57	62	60	53	51	49	63.3
Powellton	Maximum...	85	78	86	91	89						95	90	89	88	89	90	93	91	90	92	89	93	91	90	89	88	89	90	87	85	86	89.0
	Minimum...	70	65	60	68	66						67	68	61	51	60	65	67	66	64	65	51	58	60	61	59	58	57	56	54	52	53	60.8
Robertsburg§	Maximum...	89	85	95	89	93	94	95	89	86	92	91	86	76	80	72	89	91	94	94	93	94	92	72	82	87	90	85	73	80	85	89	87.2
	Minimum...					71	71	72	72	71	70	72	71	71	50	58	65	70	70	69	67	68	69	67	62	56	62	63	57	50	56	53	64.9
Ryan	Maximum...	89	79	88	82	91	92	92	90	90	90	90	90	76	75	79	82	90	91	91	90	93	90	87	80	80	78	75	70	79	80	85	85.0
	Minimum...	66	63	57	64	66	66	68	68	70	68	68	69	58	48	58	66	63	65	66	65	65	68	68	67	65	64	59	53	47	52	52	64	62.6
Spencer§	Maximum...	89	80	87	85	88	92	92	90	91	89	90	84	70	71	89	88	90	93	94	91	91	90	75	83	85	80	70	77	71	85	88	85.1
	Minimum...	63	62	54	61	61	69	68	70	70	70	60	59	65	46	54	60	63	64	63	65	63	67	65	56	50	50	56	56	51	56	41	59.9
Union§	Maximum...	75	85	85	85	87	85	88	82	85	86	87	88	86	78	75	86	87	84	88	87	90	80	82	82	85	84	79	69	80	80	....	83.3
	Minimum...	62	61	56	62	62	65	64	67	69	62	65	65	65	46	61	67	61	60	58	58	57	64	58	49	47	52	52	57	56	55	48	59.4
White Sulphur Spgs.	Maximum...	80	75	81	82	81	85	85	82	73	81	82	82	77	73	73	75	80	79	79	81	83	83	78	76	76	79	74	71	77	75	76	78.5
	Minimum...	62	62	62	65	63	65	67	67	67	64	66	67	61	46	61	68	63	64	56	61	62	66	63	56	47	56	53	46	56	57	65	60.8
Williamson§	Maximum...	85	85	89	88	90	92	93	89	87	85	91	81	80	81	79	83	90	90	89	91	89	90	77	78	85	89	82	70	80	81	86	85.3
	Minimum...	72	70	62	72	73	74	74	74	75	74	74	71	71	60	61	68	73	72	73	73	68	70	73	64	59	61	65	64	61	61	62	68.5

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, August, 1915.



WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY
OCT 31 1916

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

SEPTEMBER, 1916

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
OCTOBER 21, 1916

Departure of the Mean Temperature from the Normal, September, 1916.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXIV. PARKERSBURG, W. VA., SEPTEMBER, 1916. No. 9.

GENERAL SUMMARY.

The past month, with an average temperature of 63.0°, was the coolest September of record for the State. The average temperature for September in 1914, however, was only 63.2°. With four exceptions, the average rainfall was also the heaviest of record for September. While the average was large, the amounts received in many of the agricultural sections were insufficient. The distribution throughout the month was also unfavorable, most of the rainfall occurring during moderate to heavy showers. Light to killing frosts occurred on the 19th and 20th, causing considerable damage to late corn. Freezing temperatures also occurred in many sections on the 30th. The conditions were favorable for outdoor work and all late crops made rapid progress until the 15th. At the close of the month an average crop of corn was nearly harvested, late apples were plentiful, and pastures were in good condition; but the potato crop was below the average.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.10 and 30.13 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.35 inches on the 11th, and 29.85 inches on the 28th. Elkins, 30.36 inches on the 11th, and 29.54 inches on the 29th.

TEMPERATURE.

The monthly mean for the State, 44 stations reporting, was 63.0°. The mean departure from the normal for 37 stations having ten or more years of record was —3.0°. During the first fourteen days the temperatures were nearly normal, except the 3d, when the morning readings were unseasonably low, and from the 5th to the 8th, when unseasonably warm weather prevailed. Cool weather prevailed after the 14th, except from the 26th to the 28th, and the temperature fell to the freezing point or slightly below at 14 stations on the 19-20th and near the freezing point at many other stations, giving heavy to killing frosts. The morning readings in many localities on the 30th were also near 32.°

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 83 per cent; 8 p. m., 68 per cent. The September averages for the same hours for the past 28 years are 84 and 71 per cent, respectively. Elkins, 8 a. m., 90 per cent; 8 p. m., 82 per cent. The September averages for Elkins for the same hours for the past 16 years are 92 and 83 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 59 stations reporting, was 3.71 inches. The departure from the normal for 42 stations having ten or more years of record was +0.85 inch. The rainfall was heaviest from the south-central counties northeastward over the mountain sections, and lightest over the western, extreme southeastern, and extreme eastern counties The amounts were especially light over the northern panhandle and Mercer county. Moderate to heavy showers fell on the 2d, 7-8th, 14-15th, 22-23d, and 28-29th. On the 14-15th and 28-29th the amounts were excessive in several localities. The 24-hour fall at Beckley on the 28th was 3.35 inches and two coal mines at Raleigh were flooded by this storm.

WIND.

The average wind velocity at Parkersburg was 5.0 miles per hour, or 0.7 mile above the September average for 26 years. The average at Elkins was 3.0 miles per hour, or 0.2 mile above the September average for 17 years. The highest velocity at Parkersburg was 19 miles per hour from the northwest on the 28th, and at Elkins 22 miles per hour from the west on the 8th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 63 per cent of the possible amount, or 5 per cent above the September average for 19 years. The average at Elkins was 65 per cent, or 13 per cent above the September average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 4th, 8th, 12th, 13th, 17th, 18th, 19th, 20th, 21st, 22d, 24th, 25th, 26th, 27th, 28th, and 30th; Bayard, 12th and 15th; Brandywine, 7th and 16th; Charleston, 25th and 30th; Green Sulphur Springs, 1st, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 14th, 15th, 16th, 17th, 20th, 22d, 25th, 26th, 27th, 28th, and 29th; Hinton, 18th and 22d; Huntington, 18th, 22d, and 30th; Mannington, 3d, 6th, 10th, 12th, 16th, 17th, 19th, 20th, 22d, 25th, 26th, 27th, and 30th; New Cumberland, 3d, 4th, 6th, 13th, 19th, 20th, 22d, and 25th; Romney, 3d, 4th, 6th, 10th, and 16th; Rowlesburg, 1st. 3d, 4th, 6th, 12th, 13th, 14th, 17th, 19th, 20th, 21st, 22d, 26th, 27th, and 30th; St. Marys, 1st, 17th, 19th, 20th, 22d, 25th, and 26th.

Frost, killing: Bayard, 17th; Buckhannon, Burlington, Brandywine, Holcomb, Lost Creek, Marlinton, Morgantown, New Cumberland, Parsons, Pickens, Romney, and Wellsburg, 19th; Dunlow, 21st; Evans and Ryan, 30th.

Hail: Marlinton and White Sulphur Springs, 22d.

Halo, solar: Western, 28th.

Thunderstorms (dates and number of stations reporting): 1st, 4; 2d, 1; 4th, 1; 5th, 2; 6th, 3; 7th, 2; 8th, 5; 14th, 9; 21st, 1; 22d, 5; 27th, 1; 28th, 7; 29th, 2.

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	66.8	..	...	1.66	....	....	....	..	..	..
1892	64.4	92	32	2.57	....	....	....	..	..	..
1893	65.0	91	29	2.28	4.50	1.05	....	..	..	..
1894	67.8	98	31	2.50	4.75	1.25	....	12	11	7
1895	70.3	107	29	1.70	4.25	0.42	....	17	8	5
1896	65.2	95	22	4.59	9.04	1.58	....	14	9	7
1897	66.4	103	27	1.14	4.00	0.02	....	22	6	2
1898	67.6	97	33	2.42	4.75	0.80	....	16	10	4
1899	64.0	100	26	3.65	6.35	1.65	....	14	9	7
1900	71.1	100	35	1.92	5.50	0.34	....	14	10	6
1901	64.8	95	27	3.35	7.64	1.46	....	13	8	9
1902	64.8	98	25	2.98	4.81	1.23	....	12	9	9
1903	64.7	97	25	1.30	2.78	0.10	....	21	6	3
1904	67.0	95	25	1.76	4.55	0.53	....	16	10	4
1905	65.6	97	29	2.21	4.21	0.54	....	18	8	4
1906	69.9	97	38	3.25	5.44	0.57	....	12	10	8
1907	66.3	93	30	4.41	7.10	2.00	....	12	10	8
1908	65.9	89	24	0.95	2.54	0.26	....	21	6	3
1909	63.7	95	28	2.74	8.75	0.63	....	15	9	6
1910	68.4	97	32	3.50	6.04	0.50	....	12	11	7
1911	68.8	100	32	4.67	8.30	1.80	....	12	11	7
1912	68.6	98	30	3.85	9.18	1.13	....	17	7	6
1913	64.2	100	25	2.88	6.38	0.86	....	14	7	9
1914	63.2	97	24	1.58	5.65	0.17	....	18	6	6
1915	67.6	100	31	3.84	7.18	2.00	....	16	8	6
1916	63.0	99	27	3.71	7.88	1.01	....	18	6	6
Means and Extremes..	66.4	107	22	2.75	9.18	0.02	....	15	9	6

Climatological Data for September, 1916.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	57.2	−3.3	82	4†	27	19	39	6.14	+2.90	2.38	0.0	9	14	8	8	w.	G. C. Dixon.
Brandywine	Pendleton		0	62.0		90	8	30	20	44	4.60		1.85	0.0	7	26	3	1	n.	Elmer Keister.
Burlington	Mineral	875	22	61.5[a]	−3.4	89[a]	8	33[a]	19	42[a]	4.95	+2.20	1.90	0.0	6	14	16	0	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27								2.51	−0.34	0.85	0.0	6				w.	S. W. Lightner.
Lost City	Hardy		10																	B. D. Hinegardner.
Martinsburg	Berkeley	435	24	64.3	−2.3	94	8	39	20	43	3.19	+0.40	1.10	0.0	6	24	5	1	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	66.4	−0.4	99	8	33	19	51	3.15	+0.54	1.43	0.0	5	28	0	2		M. S. Henkel.
Piedmont[b]	Mineral	919	0	62.0		87	5	33	30	44	1.78			0.0		13	8	1	se.	C. A. Suter, Jr.
Romney	Hampshire	824	19	64.8	−1.8	93	8	32	19	46	3.15	+0.70	1.66	0.0	8	15	13	2		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18			89	7†				2.80	+0.44	1.20	0.0	4	24	5	1	s.	J. M. Mallow.
Averages and	Extremes			62.6	−2.2	99	8	27	19	51	3.59	+0.98	2.38	0.0	6	20	8	2	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	65.5	−2.8	90	6	34	30	34	3.25	+0.92	1.11	0.0	9	22	6	2		J. D. Riggs.
Brandonville	Preston	1,809	6								2.97		1.05	0.0	4					W. T. Miller.
Buckhannon	Upshur	1,411	20	61.5	−3.1	85	6	33	19†	37	5.59	+2.54	1.66	0.0	9	22	6	2		H. A. Darnall.
Cairo	Ritchie	674	14																	Van A. Zevely.
Central Station	Doddridge	950	19																	D. H. Doak.
Cheat Bridge	Randolph	3,600	4								7.51		3.20	0.0	9					Walter Cole.
Cortland	Tucker	3,300	1								3.41		1.81	0.0	4					Samuel Harmon
Creston	Wirt	701	15	64.8	−2.9	94	6	34	30	42	3.25	+0.58	0.94	0.0	8	18	5	7	sw.	J. M. Reed.
Davis	Tucker	3,093	8								6.06		2.88	0.0	7	20	4	6	sw.	Ross C. Male.
Elizabeth	Wirt	646	5								2.90		1.21	0.0	5					E. D. Ball.
Elkins	Randolph	1,940	16	60.3	−1.6	86	6	31	30	43	4.87	+2.00	1.85	0.0	9	13	9	8	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	64.8	−2.7	93	13	32	30	44	2.56	−0.04	1.09	0.0	8	23	4	3	w.	F. P. Hall.
Glenville	Gilmer	738	23	67.2	−0.5	98	6	35	19†	44	5.48	+2.20	1.56	0.0	7	18	6	6	w.	M. T. Brannon.
Grafton	Taylor	1,000	24																	J. W. Leith.
Lost Creek	Harrison	1,026	19	63.0	−2.3	91	6	30	19†	44	3.87	+0.04	1.73	0.0	10	20	7	3	w.	Allen Smith.
Mannington	Marion	974	14	61.0	−4.7	86	5†	30	30	40	3.54	+0.21	1.12	0.0	11	18	6	6	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	64.8	−2.8	89	5	32	19†	42	2.85	−0.27	0.77	0.0	12	19	3	8	s.	Prof. Edgar L. Andrews
Moundsville††	Marshall	642	14																	M. Z. White.
New Cumberland	Hancock	987	19	62.6	−3.1	90	7	33	19	44	1.48	−1.04	0.30	0.0	8	13	14	3	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	65.6	−3.2	91	6	36	30	39	2.03	−0.71	0.62	0.0	7	20	4	6	s	Wm. Ankrom.
Parkersburg	Wood	638	28	64.2	−1.9	90	7	35	30	35	3.18	+0.46	1.05	0.0	11	17	8	5	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	58.4	−5.2	84	6	31	19†	48	3.46	+0.15	1.64	0.0	4	22	2	6		J. W. Swisher.
Philippi	Barbour	1,149	20	64.0	−1.7	88	6†	31	30	40	2.89	−0.33	0.98	0.0	10	11[a]	17[a]	1[a]	w.	Okey J. Robinson.
Pickens	Randolph	2,697	14	58.8	−3.1	83	27	30	30	38	7.88	+4.04	3.60	0.0	9	21	5	4	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30								5.86	+3.00	1.84	0.0	7				e.	J. F. Pierce.
Saint Marys	Pleasants	577	8								2.55		0.85	0.0	8				w.	Wm. Hughes.
Smithfield	Wetzel	835	11	62.8[a]	−2.8	85[a]	6†	33	20	42[a]	4.04	+0.60	1.75	0.0	8	19	7	4	nw.	G. M. Whisler.
Terra Alta	Preston	2,612	16																	C. F. Dodge.
Wellsburg	Brooke	1,225	16	62.0	−2.9	83	6†	34	19	32	2.26	−0.62	0.65	0.0	8	17	8	5	w.	C. P. Waugh.
Weston[b]	Lewis	1,026	21	60.6		86	13	30	30	41										Weston State Hospital.
Wheeling	Ohio	645	30	65.6		94	7	35	19†	46	1.79	−0.83	0.68	0.0	7	18	6	6	sw.	Miss M. B. Forsyth.
Averages and	Extremes			63.0	−2.8	98	6	30	30	46	3.82	+0.68	3.60	0.0	8	18	7	5	w.	
Southern Division.																				
Bancroft	Putnam	574	12	64.0	−5.8	89	7	35	30	39	2.36	−0.54	0.88	0.0	6	22	0	8	ne.	R. E. Dent.
Beckley	Raleigh	2,440	16	61.9	−1.8	86	7	32	30	47	7.80	+5.43	3.68	0.0	5	20	7	3	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	63.4	−2.9	86	7†	33	20	39	1.01	−1.79	0.91	0.0	2	22	3	5		Norfolk & Western Ry
Charleston	Kanawha	597	13	68.9	−1.6	94	6	38	30	43	3.26	+0.32	1.22	0.0	7	8	1	21	e.	C. V. Lewis.
Clay	Clay	706	0								3.55		1.50	0.0	6					Prof. E. H. Knabenshue
Cuba	Jackson	650	14	63.2	−3.9	89	7	31	30	41	2.48	+0.08	1.15	0.0	7	15	15	0	w.	C. T. Perry.
Dam 22 O. R.	Jackson	538	1								2.71		1.31	0.0	4				w.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0								2.33		0.61	0.0	5				nw.	U. S. Engineer Office.
Dunlow	Wayne	703	8								4.15		1.95	0.0	4	20	2	8		James W. Damron.
Elkhorn	McDowell	1,933	23	64.0	−2.5	87	7	36	30	54	2.96	+0.12	1.68	0.0	6	14	8	8	w.	J. J. Lincoln.
Evans	Jackson	606	0								2.59		0.44	0.0	9	21	1	8		B. F. Sayre.
Green Sulphur Spgs	Summers	1,600	20	63.7	−2.6	88	5	31	30	40	5.05	+2.72	2.20	0.0	4	23	3	4	n.	W. H. Gwinn.
Hinton	do	1,450	19	64.3	−4.0	91	7†	37	30	35	3.36	+0.66	1.60	0.0	8	14	2	14	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	61.6		87	6†	30	20	44	6.31			0.0	6	17	4	9		R. E. Ferguson.
Huntington	Cabell	538	20	65.0	−3.7	92	7	36	30	35	3.29	+0.98	1.75	0.0	5	18	3	9	w.	L. H. Hutchinson.
Lanes Bottom	Webster	2,062	0								3.60		2.00	0.0	4	16	4	10	se.	C. A. Droddy.
Lewisburg	Greenbrier	2,200	16	61.4	−3.3	87	14	30	20	44	4.01	+1.31	2.10	0.0	6	17	13	0	nw.	Geo. T. Argabate.
Logan	Logan	687	13																	W. H. Oliver, Jr.
Madison	Boone	704	10																	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	57.2	−5.3	80	6†	30	19†	34	4.31	+1.19	2.30	0.0	6	13	12	5	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23	57.6[f]		75[f]	5†	32	20	28[f]	5.40	+2.55	2.00	0.0	5	15[g]	4[g]	4[g]		Miss Donna Tully.
Point Pleasant	Mason	553	23	65.2	−4.5	94	7	30	30	43	2.76	+0.50	1.05	0.0	8	16	4	10	sw.	W. D. Holmes.
Powellton	Fayette	933	20																	S. C. Lampert.
Renick	Greenbrier	1 653	0								4.40		2.20	0.0	4				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	16	65.4	−3.3	94	6†	37	17	43	2.02	−0.40	0.57	0.0	6	18	0	12	s.	E. C. Brace, Jr.
Ryan	Roane	700	13	61.4	−5.2	89	6	29	30	46	3.25	+0.40	0.72	0.0	11	19	4	7		Wm. E. Ryan.
Spencer	do	784	12	63.4	−3.0	90	6	29	30	50	4.75	+1.67	1.55	0.0	5	13	13	4		A. M. McKown.
Sutton	Braxton	839	10																	Ben Gillespie.
Union	Monroe	2,250	12	62.7[a]	−2.6	89[a]	6	32	20	45[a]	3.95	+1.23	2.10	0.0	5					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	62.1		82	5†	39	20	36	2.47		0.67	0.0	5	22	5	3	w.	J. M. Ayres.
Williamson	Mingo	660	16	67.1	−2.9	92	7	40	30	38	4.10	+1.22	2.62	0.0	9	21	5	4	w.	J. F. Keyser.
Averages and	Extremes			63.1	−3.5	94	6†	30	20	47	3.64	+0.99	3.68	0.0	6	18	4	8	w.	
State Averages and	Extremes			63.0	−3.0	99	8	27	19	51	3.71	+0.85	3.68	0.0	7	18	6	6	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

f Approximated by the observer

Daily Precipitation for September, 1916.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac		1.14				.30	T.	.12						1.70	.68			T				.16	.03					.02	1.99			6.14
Brandywine	do		.18				.16		T.	.08					.08	1.37							.88							1.85			4.60
Burlington	do	T.	.30			T.	.88		T.						1.90								.24					*	1.63				4.95
Harpers Ferry	do		1.05						.85								.10							.70					.60		.21		2.51
Lost City	do																																
Martinsburg	do	.33						.12								.65			.15				1.10						.84				3.19
Moorefield	do		.17							.02						.85							.68						1.43				3.15
Piedmont	do		.10				.18	.01	.08						.01	*	*	*	*	*	*	*	*							1.40				1.78
Romney	do	.08	.32			T.			.05					T.	.12	.47								.45					*	1.66				3.15
Upper Tract	do					T.			.13							1.20							.30							1.17				2.80
Northern Division.																																	
Bens Run	Ohio	.04				.10		.33	1.00						.48	.63							.24						.26	.17				3.25
Brandonville	Monongahela									.77						1.01	.14													1.05				2.97
Buckhannon	do	.60	.22				T.	.15	.55						.40	1.66							.20						.45	1.36				5.59
Cairo	Little Kanawha																																
Central Station	Middle Is. Creek							1.39	.38						.65																			†††
Cheat Bridge			.30	.35					.18	.63						2.00	.24							.43						3.20	.18			7.51
Cortland	Monongahela		.35													1.05	.20													1.81				3.41
Creston	Little Kanawha		.70					.18	.48	.39					T.	.94							.10	.10						.36				3.25
Davis	Monongahela		.50							.53						2.88	.14			T.				.18						1.72	.11			6.06
Elizabeth	Little Kanawha		.16						.78							1.21								.10					.65					2.90
Elkins ***	Monongahela	.11	.22					T.	.94						1.31	.54			T.				.15	.03					1.09	.48				4.87
Fairmont	do		.25	T.			.02	T	T.	.47						1.07	.02		T.					.18						.55	.02			2.56
Glenville	Little Kanawha		1.56					T	.76	1.16						1.19							T.	.15						.60	.06			5.48
Grafton	Monongahela																																
Lost Creek	do	.60	.10			.03	.15	.20							.11	1.62			T.				.13	T.					.40	.53				3.87
Mannington	do	.01	.09			.04	.16	.03	1.12						.12	.85							.29						.13	.70				3.54
Morgantown	do	.05	.04				.03		.60	.05					.28	.77							.23	.01					.04	.74	.01			2.85
Moundsville	Ohio																																
New Cumberland	do	T.	.13			T.		.30	.25						.16	.07						T.	.13						.25	.19				1.48
New Martinsville	do							.12	.18						.62	.28							.18						.45	.20				2.03
Parkersburg ***	Ohio	.04	.03			T.	T.	1.05	.14						.79	.15		T.				.06	.13	.02					.76	.01				3.18
Parsons	Monongahela	T.	1.35						.33						T.								.14						T	T.	1.64			3.46
Philippi	do	.18	.30			.08	.10	.06	.10						.72								.13					.24	.98					2.89
Pickens	do		.60				T.	.15	.75	.20					2.97	.63							.23						.42	1.93				7.88
Rowlesburg	do		1.40	.10				T.		.54						1.84	.14							.20						1.64	T.			5.86
Saint Marys	Ohio		.03					.80	.05	.15					T.	.83		T	.03	T.			T.	.16	T.	T.				.50				2.55
Smithfield	Fishing Creek		.12	T.			.28	.33		.61						1.75			T.				.02	.30						.63	T.			4.04
Terra Alta	Monongahela																																
Wellsburg	Ohio	T.				.24	T.	.05	.40						.25	.10							.35						.22	.65				2.26
Weston	Monongahela														.10	1.65							.10							.10	1.70			†††
Wheeling	Ohio		T.				.07	.68	T.	.11						.38							.10	.03						.42	T.			1.79
Southern Division.																																	
Bancroft	Great Kanawha		.30					.13		.44						.88								.13						.48				2.36
Beckley	do		.25						.28						3.68								.24						3.35					7.80
Bluefield	do		.10													.91																		1.01
Charleston	do		.30							.25					.10	1.12								.26						1.03	.20			3.26
Clay	do		.30						.20	.35						1.60							.20							.90				3.55
Cuba	Sand Creek	.05							T.						1.15	.35							.30	.04					.43	.16				2.48
Dam 22 O. R.	Ohio		.39												T.	1.31								.47						.54				2.71
Dam 26 O. R.	do		.43							.21					.58									.50						.61				2.33
Dunlow	Big Sandy					.40								1.95										1.60							.20			4.15
Elkhorn	do		.02						.67							.29							.07						.23	1.68				2.96
Evans	Ohio	33	.27				T.		.24						.36	.40							.14	.12					.44	.29				2.59
Green Sulphur Spgs.	Great Kanawha		.50								.60					2.20														1.75				5.05
Hinton	do		.06	.10						.02					.02	1.58								.16						1.38	.04			3.36
Holcomb	do		.24												*	3.80							.23						*	2.04				6.31
Huntington	Ohio		.48						1.75						T.	.28								.40						.38				3.29
Lanes Bottom	Great Kanawha														2.00	.20							.20							1.20				3.60
Lewisburg	do		.49						.10						.29	.90							.13							2.10				4.01
Logan	Guyandotte																																
Madison																																	
Marlinton	Great Kanawha		.06			T.	T.	.06	.16					T.	.08	2.30												T.	T.	1.65				4.31
Nuttallburg	do		.30					.30							2.00														1.60	1.20				5.40
Point Pleasant	Ohio		.53					.03		.10					.08	1.03			.02					.22						.75				2.76
Powellton	Great Kanawha									1.00																								†††
Renick	do										.30					1.70									.20					2.20	T.			4.40
Robertsburg	do		.57							.18					.15	.35								.42						.35				2.02
Ryan	do	.23	.18				.01	.41	.72						.56	.59							.11	.06					.07	.31				3.25
Spencer	Little Kanawha		.50					1.50		.80						1.55														.40				4.75
Sutton	Great Kanawha																																
Union	do		.30						.20							1.00							.35					2.10					3.95
White Sulphur Spgs.	do		.25			.43														.67			.50						.62					2.47
Williamson	Big Sandy		.24	.08			.10		.04						.02	2.60								.08						.90	.04			4.10

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

|||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for September, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	79	69	70	82	81	82	80	80	70	69	70	72	78	76	70	60	70	65	64	66	70	68	60	62	62	70	78	74	66	57	....	70.7
	Minimum	53	56	35	43	45	57	56	62	44	41	48	36	41	43	46	40	31	33	27	30	31	48	49	48	42	43	52	56	44	32	....	43.7
Brandywine	Maximum	88	82	79	82	89	88	89	90	78	77	74	76	86	86	80	67	75	76	67	72	78	79	73	71	71	80	80	81	74	60	....	78.3
	Minimum	48	64	46	45	53	55	60	61	59	41	46	37	47	61	65	41	33	42	31	30	34	46	47	35	37	39	43	46	51	32	....	45.8
Burlington	Maximum	88	79	74	83	88	87	85	89	75	72	75	78	86	80	74	65	72	75	62	71	77	78	61	70	70	79	84	....	66	59	....	75.9
	Minimum	58	60	43	44	55	60	63	65	57	44	45	41	45	58	57	45	35	44	33	35	35	47	49	40	40	40	44	....	49	35	....	47.1
Martinsburg§	Maximum	89	80	75	83	91	38	88	94	79	79	77	77	88	85	75	68	74	76	76	73	77	82	74	72	70	80	86	86	59	61	....	78.7
	Minimum	56	58	48	48	48	58	65	66	62	51	49	46	49	51	65	50	41	43	40	39	40	44	54	47	46	43	45	52	53	41	....	49.9
Moorfield	Maximum	95	85	83	93	97	95	95	99	82	80	82	83	93	92	85	73	81	82	68	79	86	84	76	75	70	85	90	90	77	63	....	83.9
	Minimum	53	67	45	45	56	61	66	62	59	45	46	42	49	58	65	44	47	44	33	34	35	49	54	39	40	41	46	53	54	35	....	48.9
Piedmont	Maximum	84	76	73	82	87	86	83	85	75	73	73	74	83	79	....	....	....	....	....	....	....	....	67	66	69	78	83	81	73	57	....	76.7
	Minimum	50	62	41	42	43	58	62	63	55	45	45	44	43	56	....	....	....	....	....	....	....	....	49	37	37	38	44	45	50	33	....	47.4
Romney	Maximum	90	85	78	86	91	90	89	93	85	83	88	78	89	83	77	76	77	78	67	73	80	76	80	73	70	79	70	85	77	64	....	80.3
	Minimum	52	65	41	45	57	60	63	68	57	42	44	42	46	59	63	61	35	43	32	34	34	40	43	54	52	60	58	41	52	40	....	49.4
Upper Tract	Maximum	88	85	80	80	88	88	89	89	85	80	89	80	89	85	85	78	76	75	72	73	79	80	79	70	69	80	82	83	79	70	....	80.5
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Northern Division.																																	
Bens Run	Maximum	83	79	80	86	87	90	89	82	78	82	84	85	89	78	69	67	76	67	67	74	77	62	69	70	76	82	84	81	65	62	....	77.3
	Minimum	59	63	47	52	67	64	66	68	59	59	62	62	63	64	65	44	42	48	39	41	45	51	50	44	42	48	52	62	49	34	....	53.7
Buckhannon	Maximum	83	78	74	81	83	85	80	84	73	77	78	80	82	77	76	61	69	69	61	70	75	75	67	63	68	74	79	79	68	55	....	74.1
	Minimum	54	65	47	49	58	63	68	65	62	57	48	44	50	58	58	46	36	45	33	34	38	44	52	39	38	40	45	50	48	33	....	48.9
Creston	Maximum	88	83	82	87	90	94	87	87	82	84	85	83	90	83	73	68	78	69	69	77	80	71	71	75	79	83	86	83	64	64	....	79.8
	Minimum	55	65	47	49	60	64	65	63	60	51	54	49	49	63	60	40	38	48	35	35	40	40	50	40	39	42	47	58	52	34	....	49.7
Elkins	Maximum	83	75	78	83	85	86	84	86	74	75	79	80	83	79	68	60	72	69	60	75	78	73	64	66	67	78	81	78	60	54	....	74.4
	Minimum	50	53	48	45	56	61	62	63	50	46	56	42	48	57	50	39	34	42	32	32	35	54	45	38	38	41	43	56	40	31	....	46.2
Fairmont§	Maximum	85	87	86	88	90	91	89	90	76	86	89	91	93	80	74	70	79	67	70	81	80	74	71	73	76	84	86	85	61	61	....	80.4
	Minimum	55	63	46	50	54	63	64	66	61	49	51	49	50	55	64	41	37	41	35	37	39	47	51	40	39	42	47	55	52	32	....	49.2
Glenville	Maximum	89	88	84	90	96	98	95	89	84	89	89	88	90	88	78	70	81	70	71	80	83	80	74	75	77	88	88	92	82	65	....	83.7
	Minimum	55	61	48	51	59	65	66	63	63	51	51	49	52	61	63	42	40	47	35	38	40	53	42	46	40	44	47	59	52	35	....	50.6
Grafton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Lost Creek	Maximum	86	81	81	87	88	91	87	88	75	81	86	87	88	81	74	65	75	71	66	76	79	72	68	71	78	82	93	84	63	59	....	78.4
	Minimum	52	64	59	45	60	61	63	66	61	45	50	43	47	52	61	38	33	34	30	32	35	50	48	37	35	39	45	62	50	30	....	47.6
Mannington	Maximum	80	76	75	83	86	86	84	85	73	79	80	81	83	76	71	62	72	64	62	72	76	68	65	68	71	78	81	80	68	56	....	74.7
	Minimum	53	64	41	46	57	60	62	62	57	45	49	45	45	58	60	38	35	49	31	34	36	49	47	37	36	40	44	56	49	30	....	47.2
Morgantown	Maximum	86	76	82	86	89	87	86	85	72	75	78	79	87	81	70	64	75	75	64	76	77	72	66	68	72	79	83	81	70	74	....	77.2
	Minimum	61	64	45	53	66	63	67	66	58	51	57	52	53	64	57	42	38	50	32	39	48	56	54	44	42	46	61	65	47	32	....	52.4
New Cumberland	Maximum	80	76	76	86	88	88	90	84	76	77	82	83	87	79	70	66	74	68	63	77	77	68	67	69	77	84	85	78	65	58	....	76.6
	Minimum	53	60	38	44	65	59	61	63	50	45	52	48	47	57	53	39	37	46	33	45	47	49	49	41	39	40	58	61	45	34	....	48.6
New Martinsville	Maximum	81	79	80	88	90	91	90	83	80	85	86	86	88	81	71	67	78	66	68	77	77	73	69	74	76	84	85	81	74	66	....	79.1
	Minimum	58	67	49	50	64	64	65	67	59	50	53	51	49	62	62	41	39	51	37	38	42	51	52	42	43	46	51	61	60	36	....	52.0
Parkersburg	Maximum	84	78	78	86	88	90	90	85	76	80	80	80	85	72	68	64	74	64	65	73	77	64	66	70	74	82	84	80	58	57	....	75.7
	Minimum	62	59	51	52	68	65	68	65	60	56	60	56	55	65	54	45	41	47	38	40	50	53	49	42	41	47	58	56	43	35	....	52.7
Parsons	Maximum	81	72	73	78	82	84	80	83	73	73	76	77	82	74	60	59	70	70	59	65	75	70	58	68	66	75	78	77	60	55	....	71.8
	Minimum	53	54	42	45	34	62	62	60	55	45	48	41	44	60	56	39	37	39	31	38	39	40	39	31	38	41	43	55	45	32	....	44.9
Philippi	Maximum	84	77	80	84	86	88	84	88	75	77	80	78	85	80	75	67	72	69	69	74	78	76	64	68	70	79	82	81	70	57	....	76.6
	Minimum	59	65	54	55	66	65	67	66	56	45	53	52	45	59	56	42	37	50	33	35	46	56	53	42	44	47	56	60	47	31	....	51.4
Pickens	Maximum	77	70	71	77	77	79	76	78	67	76	77	78	78	75	63	55	66	67	55	72	76	68	66	66	67	78	83	72	60	55	....	70.8
	Minimum	62	55	46	47	57	59	61	61	52	51	51	40	47	58	49	36	35	38	31	34	40	54	45	38	38	41	47	56	44	30	....	46.8
Terra Alta	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Wellsburg	Maximum	76	74	72	80	82	83	83	78	72	75	77	78	80	73	67	60	70	59	61	71	74	65	63	64	73	76	79	75	63	53	....	71.9
	Minimum	60	60	45	53	66	63	66	66	56	53	56	53	52	64	57	43	40	49	34	42	48	52	53	46	41	48	59	56	46	39	....	52.2
Weston§	Maximum	....	....	....	....	....	....	....	....	76	85	84	83	86	81	74	64	74	71	63	74	78	73	67	69	72	80	83	82	72	58	....	75.0
	Minimum	....	....	....	....	....	....	....	....	60	50	48	48	54	59	60	41	38	59	35	36	40	52	53	41	41	39	42	49	44	30	....	46.3
Wheeling§	Maximum	82	87	85	92	91	92	94	85	84	85	87	89	91	78	72	71	81	72	74	82	84	64	72	77	86	85	89	84	61	67	....	81.4
	Minimum	59	68	45	50	52	64	64	68	57	51	52	52	49	52	59	40	41	42	35	36	42	44	54	44	40	42	49	56	53	35	....	49.8
Southern Division.																																	
Beckley	Maximum	82	76	75	78	84	85	86	84	74	75	74	78	79	81	71	68	74	74	74	73	78	79	77	78	79	70	83	79	77	79	....	77.5
	Minimum	50	55	40	31	57	55	57	63	53	50	44	46	46	63	42	38	58	36	34	40	44	45	49	48	48	42	43	48	33	32	....	46.3
Bluefield	Maximum	81	81	81	78	82	84	86	86	84	84	84	75	78	75	68	62	69	74	64	71	72	72	69	78	69	79	79	80	72	57	....	75.4
	Minimum	59	62	58	57	67	58	60	60	62	62	53	49	59	59	57	43	39	41	39	33	42	53	50	51	40	40	50	60	45	35	....	51.4
Charleston	Maximum	91	89	87	90	91	94	90	93	92	92	90	86	85	87	84	82	81	86	82	80	84	81	76	74	80	87	88	85	80	80	....	85.6
	Minimum	61	59	60	62	65	66	65	65	64	55	55	50	51	56	66	44	41	46	39	40	41	47	52	42	45	44	45	51	52	38	....	52.2
Elkhorn	Maximum	82	80	78	82	84	85	87	85	76	74	74	74	76	80	76	61	72	73	71	71	72	72	68	67	69	77	78	79	79	56	....	75.3
	Minimum	58	54	56	61	60	61	62	62	65	59	62	53	61	66	60	45	42	48	41	40	47	53	51	43	42	43	48	54	48	36	....	52.7
Green Sulphur Spgs.	Maximum	82	84	80	86	88	87	86	87	86	87	84	82	79	81	80	70	72	74	72	68	74	73	76	72	76	78	82	78	78	59	....	78.7
	Minimum	64	61	59	61	64	63	61	58	59	64	60	50	45	54	66	40	35	36	32	32	40	38	40	38	38	40	42	44	47	31	....	48.7
Hinton§	Maximum	87	79	77	84	88	87	91	91	80	79	75	76	82	88	70	64	73	78	65	70	77	77	73	72	72	78	81	82	56	61	....	77.1
	Minimum	57	60	62	54	55	64	65	65	64	55	51	48	50	63	63	44	42	48	38	40	42	45	52	46	45	45	46	49	51	37	....	51.5
Holcomb§	Maximum	84	86	78	84	86	87	85	84	87	78	78	79	84	82	66	62	75	73	64	74	76	74	72	68	70	80	82	80	54	68	....	76.7
	Minimum	50	58	54	48	53	57	59	57	52	48	53	42	50	56	60	40	34	42	32	30	36	43	48	46	38	37	42	47	50	31	....	46.4
Huntington§	Maximum	85	83	79	86	89	90	92	83	82	82	80	81	82	78	69	66	76	66	65	74	77	64	68	72	74	80	81	77	56	57	....	76.5
	Minimum	57	64	55	55	57	68	68	71	62	57	61	54	53	55	64	45	42	47	39	41	42	54	53	45	47	47	51	60	53	36	....	53.4
Lewisburg	Maximum	85	78	78	82	86	84	83	85	82	75	76	74	79	87	78	64	74	72	66	72	78	74	69	69	69	80	80	79	71	60	....	76.3
	Minimum	51	56	54	47	53	60	61	59	60	50	49	43	51	65	55	40	36	41	34	30	34	45	45	45	36	36	40	45	47	31	....	46.6
Madison§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Marlinton	Maximum	78	76	74	76	78	80	74	80	78	76	72	66	76	74	70	60	64	66	64	62	68	68	64	62	60	66	72	74	60	52	....	69.7
	Minimum	48	58	50	46	52	58	60	58	54	44	42	40	46	56	60	38	34	40	30	31	34	46	48	36	34	38	38	46	48	30	....	44.8
Point Pleasant	Maximum	87	83	80	90	91	93	94	87	81	84	81	84	88	79	73	69	80	70	69	78	81	70	72	76	80	86	87	83	64	62	....	80.1
	Minimum	57	64	46	49	65	62	66	66	55	50	55	48	48	65	58	37	37	50	33	36	45	48	48	40	41	43	54	60	50	30	....	50.2
Powellton	Maximum	83	80	78	79	75	76	80	75	81	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	50	53	48	51	46	42	41	45	43	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Robertsburg§	Maximum	85	80	80	88	91	94	94	85	84	82	82	88	89	83	70	69	80	68	71	78	82	68	69	73	78	85	86	83	58	69	....	79.7
	Minimum	59	56	50	52	58	56	67	66	61	53	56	49	50	60	63	39	37	44	50	40	41	52	54	50	45	47	53	56	34	38	....	51.2
Ryan	Maximum	80	75	76	85	86	89	85	80	81	75	79	80	86	81	75	68	65	66	65	76	78	71	75	72	76	80	84	83	68	60	....	76.7
	Minimum	47	64	42	42	58	61	63	60	64	50	52	43	48	63	60	37	35	33	30	30	37	38	46	35	35	37	42	52	48	29	....	46.0
Spencer§	Maximum	89	82	82	89	87	90	83	89	80	85	86	85	87	83	75	68	79	68	68	79	86	70	73	75	76	86	70	85	68	60	....	79.4
	Minimum	54	65	45	46	55	53	63	63	65	49	53	45	47	63	63	36	34	47	31	31	40	46	46	35	35	36	47	46	52	29	....	47.3
Union§	Maximum	80	82	85	87	87	89	88	87	81	78	77	80	85	77	65	76	78	69	74	77	78	70	70	70	80	80	81	75	72	....	....	78.6
	Minimum	51	62	58	52	50	58	60	57	59	49	49	45	54	60	59	40	36	40	37	32	36	37	42	37	38	36	41	48	49	33	....	46.8
White Sulphur Spgs.	Maximum	79	78	76	75	82	80	82	80	78	67	66	77	79	79	78	74	75	74	70	68	70	69	70	67	71	76	75	78	72	69	....	74.5
	Minimum	56	54	52	50	56	54	56	53	50	51	51	50	43	54	50	51	54	40	41	39	50	47	58	42	50	48	49	49	45	48	....	49.7
Williamson§	Maximum	88	80	82	87	85	90	92	89	81	81	82	82	89	80	71	66	77	73	68	75	79	68	72	73	76	82	85	78	56	61	....	78.3
	Minimum	64	67	63	61	61	70	70	70	68	60	65	53	55	60	66	46	46	48	44	45	47	50	57	50	50	47	47	55	53	40	....	55.9

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

/E

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY
NOV 22 1916

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

OCTOBER, 1916

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
NOVEMBER 20, 1916

Departure of the Mean Temperature from the Normal, October, 1916.



Shaded portions show excess (+). Unshaded portions show deficiency (—). Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXIV. PARKERSBURG, W. VA., OCTOBER, 1916. NO. 10.

GENERAL SUMMARY.

The month was sunshiny and somewhat drier than usual, with the temperature averaging practically normal. The last decade was especially pleasant. Over the greater portion of the State, growth continued until the beginning of the second decade, when heavy to killing frosts were general. While practically all the rainfall was received during the second decade, it was well distributed over the State. The conditions were favorable for fall seeding and outdoor work. The roads were in excellent condition at the close of the month.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.16 and 30.20 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.45 inches on the 23d, and 29.49 inches on the 20th. Elkins, 30.50 inches on the 23d, and 29.45 inches on the 20th.

TEMPERATURE.

The monthly mean for the State, 44 stations reporting, was 54.1°. The mean departure from the normal for 39 stations having ten or more years of record was —0.4°. Seasonally low temperatures prevailed on the 1st-3d, 10-15th, 17-18th, and 22-23d, with light to killing frosts, while the weather was abnormally warm on the 7-9th and from the 29th to the close of the month. The highest readings on the 7th and 8th were generally near 90°.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 83 per cent; 8 p. m., 71 per cent. The October averages for the same hours for the past 28 years are 83 and 70 per cent, respectively. Elkins, 8 a. m., 90 per cent; 8 p. m., 73 per cent. The October averages for Elkins for the same hours for the past 17 years are 89 and 78 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 60 stations reporting, was 2.38 inches. The departure from the normal for 43 stations having ten or more years of record was —0.26 inch. Practically no rain was received until the 9th, when light to moderate showers occurred. Showers also occurred in many sections daily from the 13th to the 20th, the rainfall being moderately heavy on the 15-16th and 19-20th. No rainfall of importance occurred during the last eleven days, although there were light and scattered showers on the 26th, 30th, and 31st.

WIND.

The average wind velocity at Parkersburg was 4.4 miles per hour, or 0.5 mile below the October average for the past 26 years. The average at Elkins was 3.4 miles per hour, or 0.1 mile above the October average for 17 years. The highest velocity at Parkersburg was 28 miles per hour from the northwest on the 25th, and at Elkins 23 miles per hour from the southeast on the 19th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 57 per cent of the possible amount, or 18 per cent above the October average for 19 years. The average at Elkins was 61 per cent, or 16 per cent above the October average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 11th, 12th, 14th, 15th, 17th, 19th, 20th, 23d, 24th, 25th, 26th, 27th, 28th, 29th, 30th, and 31st; Bayard, 9th; Charleston, 7th, 11th, 12th, 14th, 18th, 23d, 24th, and 28th; Dam No. 26, 2d, 3d, 4th, 11th, 12th, 14th, 23d, and 28th; Elkins, 1st, 2d, 3d, 7th, 8th, 11th, 12th, 18th, 23d, 24th, 27th, 28th, and 31st; Fairmont, 24th, 28th, and 31st; Green Sulphur Springs, 1st, 2d, 3d, 7th, and 8th; Hinton, 7th and 23d; Huntington, 2d, 3d, 4th, 7th, 11th, 14th, and 28th; Kayford, 1st, 2d, 3d, 5th, 6th, 11th, 13th, 21st, and 28th; Mannington, 1st, 7th, 8th, 14th, 25th, and 31st; Marlinton, 1st, 2d, and 25th; New Cumberland, 1st, 2d, 3d, 4th, 6th, 7th, 11th, 12th, 14th, 15th, 23d, 24th, 25th, and 31st; Raleigh, 1st, 4th, 7th, 8th, and 28th; Rowlesburg, 3d, 5th, 6th, 7th, 8th, 11th, 12th, 13th, 14th, 15th, 20th, 23d, 24th, 25th, 28th, 29th, and 31st; Robertsburg, 1st, 2d, 3d, 11th, 12th, 14th, 15th, 23d, 24th, and 28th; Romney, 1st, 2d, 4th, 5th, 8th, 23d, 24th, 25th, and 26th; Wheeling, 1st, 2d, 3d, 6th, 8th, 11th, 12th, 14th, 15th, 23d, 24th, 25th, 27th, 28th, 29th, 30th, and 31st; Williamson, 3d, 4th, 5th, 11th, 12th, 13th, 14th, 15th, 24th, 27th, and 28th; St. Marys, 1st, 2d, 11th, 12th, 14th, 23d, 24th, 27th, 28th, and 31st

Halo, solar: Wellsburg, 18th.

Smoke, light: Bayard, 25th.

Snow: Bayard, 22d; Davis, 21st.

Thunderstorms (dates and number of stations reporting): 9th, 3; 13th, 1; 16th, 1; 17th, 2; 20th, 4; 31st, 8.

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	51.5	95	21	1.97	2.91	T.	....	..	..	..
1892	52.6	89	24	0.83	1.45	0.21	....	..	..	..
1893	54.1	86	16	4.74	7.22	1.00	....	25	6	4
1894	54.4	88	22	2.32	3.85	1.17	T.	16	8	7
1895	48.1	89	8	1.29	2.25	0.16	T.	22	5	4
1896	51.0	82	20	2.08	4.37	0.45	T	14	9	8
1897	58.2	95	22	0.53	2.27	0.07	....	18	7	6
1898	55.6	95	19	4.84	8.50	2.48	T.	11	10	10
1899	56.8	91	19	1.42	3.81	0.23	0	15	7	9
1900	60.9	97	24	2.33	4.80	1.15	0	16	8	7
1901	54.3	86	19	0.54	1.95	0.12	0	19	6	6
1902	56.5	87	17	2.63	5.50	0.90	T.	16	8	7
1903	54.2	96	15	2.55	4.75	0.80	T.	17	7	7
1904	54.5	92	16	1.59	3.02	0.37	T.	18	8	5
1905	54.2	95	19	4.71	8.26	2.46	T.	13	8	10
1906	54.5	86	12	3.09	8.15	1.64	1.3	11	6	14
1907	50.3	87	19	2.65	5.12	0.54	0.1	15	9	7
1908	55.1	91	16	1.60	6.88	0.33	T.	18	7	6
1909	50.0	88	14	2.79	5.27	0.60	0.1	16	7	8
1910	58.1	95	15	1.85	2.96	0.80	0.7	18	7	6
1911	56.3	88	23	5.28	9.65	3.27	0	12	7	12
1912	55.5	93	20	1.34	3.10	0.20	T.	18	6	6
1913	54.5	92	12	4.50	8.11	1.78	0.3	12	6	13
1914	57.3	91	14	2.94	6.72	1.37	T	12	8	11
1915	56.6	89	20	4.11	5.55	0.74	T.	17	7	7
1916	54.1	97	16	2.38	4.35	0.91	T.	19	5	7
Means and Extremes..	54.6	97	8	2.57	9.65	T.	0.1	16	7	8

Climatological Data for October, 1916.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	48.6	−0.7	79	8	22	23	38	3.46	−0.02	0.73	T	11	14	7	10	w.	G. C. Dixon.
Brandywine	Pendleton		0	53.6		87	7†	22	26	45	1.04		0.90	0.0	3	23	4	4	n.	Elmer Keister.
Burlington	Mineral	875	22	50.9	−2.7	86	8	24	27†	43	1.48	−0.66	0.84	0.0	4	18	12	1	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27								2.05	−0.79	1.93	0.0						S. W. Lightner.
Lost City	Hardy		10																	B. D. Hinegardner.
Martinsburg	Berkeley	435	24	53.1	−1.5	88	8	30	23	40	2.42	−0.18	1.92	0.0	7	23	7	1	s.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	55.8	+1.2	97	8	24	27	50	1.32	−0.90	0.87	0.0	4	27	2	2		M. S. Henkel.
Piedmont	Mineral	919	0	51.0		85	8	25	27	40	2.36		1.59	0.0	8	23	6	2	se.	C. A. Suter, Jr.
Romney	Hampshire	824	19	53.8[a]	−1.0	89[a]	8	25[a]	18†	45[a]	2.20	−0.20	1.17	0.0	5	16	13	2		Geo. E. Arnold,
Upper Tract	Pendleton	1,230	18	54.2[a]	−1.0	90[a]	8	22[a]	11	57[a]	1.50	−0.81	1.10	0.0	3	16	6	9	w.	J. M. Mallow.
Averages and	Extremes			52.6	−1.0	97	8	22	11†	57	1.98	−0.51	1.93	T.	6	20	7	4	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	55.6	−0.7	87	5†	30	27	42	2.16	−0.70	1.14	0.0	6	20	5	6		J. D. Riggs.
Brandonville	Preston	1,809	6								2.62		1.03		6					W. T. Miller.
Buckhannon	Upshur	1,411	20	52.6	−0.5	82	8	26	27	43	3.65	+0.43	1.30	0.0	8	22	4	5		H. A. Darnall.
Cairo	Ritchie	674	14																	Van A. Zevely.
Central Station	Doddridge	950	19								2.20	−0.24								D. H. Doak.
Cheat Bridge	Randolph	3,600	4								3.01		1.55	0.0	4					Walter Cole.
Cortland	Tucker	3,300	1								3.38		0.90	0.0	6					Samuel Harmon
Creston	Wirt	701	15	55.6	+0.3	91	8	25	27	49	2.49	−0.26	1.36	0.0	8	22	0	9	sw.	J. M. Reed.
Davis	Tucker	3,093	8								3.51		1.13	T.	7	17	5	9	sw.	Ross C. Male.
Elizabeth	Wirt	646	5								2.82		1.51		7					E. D. Ball.
Elkins	Randolph	1,940	16	51.6	+0.3	86	8	24	27	44	2.32	−0.10	0.79	T.	12	17	6	8	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	54.9	−0.2	92	8	27	27	49	2.56	−0.03	0.95	0.0	8	21	1	9	n.	F. P. Hall.
Glenville	Gilmer	738	23	58.1	+2.8	93	7†	25	27	51	2.82	−0.09	1.24	0.0	8	19	5	7	w.	M. T. Brannon.
Grafton	Taylor	1,000	24																	J. W. Leith.
Lost Creek	Harrison	1,026	19	53.6	−0.9	88	8	23	23	49	4.35	+1.92	1.06	0.0	7	22	2	7	w.	Allen Smith.
Mannington	Marion	974	14	52.6	−1.3	86	8	24	23†	47	2.79	+0.13	1.58	0.0	10	20	4	7	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	55.4	+0.2	90	6	29	11	37	1.77	−1.35	0.64	0.0	9	20	1	10	sw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	14	56.7	+0.9	91	8	27	27	49	1.95	−0.95	1.00		5	19	1	11	nw.	M. Z. White.
New Cumberland[a]	Hancock	987	19	51.6	−2.7	90	8	22	23	51	2.61	−0.11	1.81	0.0	5	19	5	6	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	57.4	+0.6	90	8	28	27	43	2.98	+0.40	1.65	0.0	7	21	3	7	s	Wm. Ankrom.
Parkersburg	Wood	638	28	55.3	+0.8	88	8	31	27	41	2.53	+0.09	1.31	0.0	8	17	5	9	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	50.9	−2.0	87	8	23	23	45	0.99	−1.87	0.25	0.0	5	23	6	2		J. W. Swisher.
Philippi	Barbour	1,149	20	54.8	+0.5	85	8	30	11†	42	3.25	+0.38	0.93	0.0	7	17	10	4	w.	Okey J. Robinson.
Pickens	Randolph	2,697	14	54.9	+2.9	84	4†	25	27	48	2.86	−0.96	0.89	0.0	10	20	3	7	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30								3.76	+0.91	1.00	0.0	6					J. F. Pierce.
Saint Marys	Pleasants	577	8								2.51		1.12	0.0	8				nw.	Wm. Hughes.
Smithfield	Wetzel	835	11	55.6[a]	+2.3	85[a]	6	29	23	40[a]	3.07	−0.33	1.30	0.0	8	20	6	5	se.	G. M. Whisler.
Terra Alta	Preston	2,612	16																	C. F. Dodge.
Wellsburg	Brooke	1,225	16	53.0	−0.6	83	8	30	23	32	3.23	+0.53	2.13	0.0	6	19	6	6	w.	C. P. Waugh.
Weston	Lewis	1,026	21	55.3	+0.4	87	8	28	27	47	3.57	+0.59	0.86	0.0	8	22	1	8		Weston State Hospital.
Wheeling	Ohio	645	30	54.4		94	8	29	27†	51	2.68	+0.28	1.25	0.0	8	20	3	8	s.	Miss M. B. Forsyth.
Averages and	Extremes			54.4	+0.1	94	8	22	23	51	2.84	−0.02	2.13	T.	7	20	4	7	w.	
Southern Division.																				
Bancroft	Putnam	574	12	54.5	−3.1	85	6†	30	23†	43	1.76	−1.18	1.15	0.0	5	25	0	6	ne.	R. E. Dent.
Beckley	Raleigh	2,440	16	54.6	+0.2	81	9	28	26†	50	2.47	+0.09	0.62	0.0	5	22	6	3	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	57.4	+1.9	85	9	30	11†	43	2.16	−0.54	0.80	0.0	4	22	5	4		Norfolk & Western Ry
Charleston	Kanawha	597	13	59.6	+3.1	91	8	29	27†	49	2.45	−0.22	1.10	0.0	6	8	0	23	w.	C. V. Lewis.
Clay	Clay	706	0								0.93		0.30	0.0	4					Prof. E. H. Knabenshue
Cuba	Jackson	650	14																	C. T. Perry.
Dam 22 O. R.	Jackson	538	1								2.20		1.49	0.0	7				w.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0								1.83		1.37	0.0	6				sw.	U. S. Engineer Office.
Dunlow	Wayne	703	8													19	2	11	w.	James W. Damron.
Elkhorn	McDowell	1,933	23	56.6	+0.8	82	8	32	11†	34	2.63	+0.07	0.78	0.0	8	14	7	10	w.	J. J. Lincoln.
Evans	Jackson	606	0								2.84		1.57	0.0	7	20	0	11		B. F. Sayre.
Green Sulphur Spgs	Summers	1,600	20	53.2	−1.4	85	10	21	27	48	1.25	−0.76	0.45	0.0	4	23	1	7	e.	W. H. Gwinn.
Hinton	do	1,450	19	54.4	−2.2	84	8	28	27	39	2.00	−0.41	0.80	0.0	7	15	3	13	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	52.6		88	7	24	27	49	2.55		0.60	0.0	9	15	5	11		R. E. Ferguson.
Huntington	Cabell	538	20	54.3	−1.9	83	8	30	27	36	2.20	−0.18	1.36	0.0	5	19	2	10	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	0								2.57		0.70	0.0	8					CabinCreek Con.Coal Co
Lanes Bottom	Webster	2,062	0								1.84		0.60	0.0	5	20	1	10		C. A. Droddy.
Lewisburg	Greenbrier	2,200	16	52.6	0.8	85	8	22	27	44	1.76	−0.91	0.84	0.0	4	16	10	5	nw.	Geo. T. Argabate.
Logan	Logan	687	13																	W. H. Oliver, Jr.
Madison	Boone	704	10																	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	48.0	−2.6	82	8	16	27	40	1.90	−1.04	0.76	0.0	8	13	12	6	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23																	Miss Donna Tully.
Point Pleasant	Mason	553	23	55.2	−2.3	90	7†	25	23	48	2.29	−0.22	1.72	0.0	7	19	2	10	sw.	W. D. Holmes.
Powellton	Fayette	933	20																	S. C. Lampert,
Rainelle	Kanawha										1.40		0.86	0.0	3					A. L. Guthrie.
Raleigh	Beckley	2,130	0								2.09		1.22	0.0	8					Raleigh Coal & Coke Co.
Ronick	Greenbrier	1 653	0								1.20		0.70	0.0	2				nw.	Wm. B. Hill
Robertsburg	Putnam	574	16	57.4[f]	+0.2	90	7†	29[f]	27	46[f]	2.24	−0.43	1.40	0.0	5					E. C. Brace, Jr.
Ryan	Roane	700	13	53.5	−0.9	88	7†	23	27	55	2.83	−0.35	1.11	0.0	12	16	8	7		Wm. E. Ryan.
Sissonville	Kanawha	625	0								0.91		0.38	0.0	4					J. N. Johnson.
Spencer	Roane	784	12	54.2	−0.7	88	9	23	28	54	2.09	−0.88	1.27	0.0	4	10	14	7		A. M. McKown.
Sutton	Braxton	839	10																	Ben Gillespie.
Union	Monroe	2,250	12	54.2[a]	+0.9	86[a]	6†	23	27†	48[a]	1.90	−0.86	0.75	0.0	6					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	54.6		80	8	30	29	36	2.64		1.25	0.0	4	22	6	3	w.	J. M. Ayres.
Williamson	Mingo	660	16	58.2	−0.2	87	7†	33	27	39	2.63	+0.11	1.10	0.0	8	20	4	7	w.	J. F. Keyser.
Averages and	Extremes			54.6	−0.9	91	8	16	27	55	2.08	−0.48	1.72	0.0	6	17	5	9	w.	
State Averages and	Extremes			54.1	−0.4	97	8	16	27	57	2.38	−0.26	2.13	T.	7	19	5	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

f Approximated by the observer.

Daily Precipitation for October, 1916.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac									.48				.32	.08	.37	.73	.50	.01	.56	.24		T.				.07					.10	3.46
Brandywine	do									.04				T.			T		T.	.90	T											.10	1.04
Burlington	do									.31				T.		.23				.84	T.											.10	1.48
Harpers Ferry |||	do									T.							1	.12		1.65	.28											2.05
Lost City	do																																
Martinsburg	do									T.				.15		.12	*	.15	*	1.92	.08										T.	2.42
Moorefield	do									.10							.03			.87											.32	1.32
Piedmont	do									.11				.06	.07		.30	.03		1.59	.14										.06	2.36
Romney	do									.18			T.				.25			1.17	.50										.10	2.20
Upper Tract	do									.30							T			1.10											.10	1.50
Northern Division.																																	
Bens Run	Ohio									.15				.05		.17	.49			1.14	.16												2.16
Brandonville |||	Monongahela										.44						1.03	.11	.64	.26	.14											2.62
Buckhannon	do									.52				.25		.17	.74	.15	.25	1.30	.27											3.65
Cairo	Little Kanawha																																
Central Station	Middle Is. Creek									*	*	*	*	.27		.24	*	.19		*	*	*	1.39									.11	2.20
Cheat Bridge |||										.90				.11			.45				1.55										3.01
Cortland |||	Monongahela										.90	.25					.59	.68	.56		.40											3.38
Creston |||	Little Kanawha										.17				.13		.37	.10		1.36	.14	.17					.05					2.49
Davis |||	Monongahela										.65				.25		1.13	.42		.50		.44					.12					3.51
Elizabeth |||	Little Kanawha																																
Elkins ***	Monongahela									.78	.01			.06		.07	.38	.25	.40	.07	.13	T.				.06	.01				.10	2.32
Fairmont |||	do										.35				.16		.64	.12		95	.12	.20					.02					2.56
Glenville |||	Little Kanawha									T.	.28				.24		.32	.12		1.24	.32	.25					.05					2.82
Grafton	Monongahela																																
Lost Creek	do									.81				.15		.05	.98	.73		1.06	.57												4.35
Mannington	do									.25	.01			.12		.06	.64	.06		1.21	.57						.03				.04	2.79
Morgantown	do									.42	.06			.21		.02	.64	.03		.02	.27						T.				.10	1.77
Moundsville	Ohio																																
New Cumberland	do									T.				.32		T.	.11			1.81	.19					T.					.18	2.61
New Martinsville	do									.25				.05		.08	.55			1.65	.35						.05					2.98
Parkersburg ***	Ohio									.11				.02		.58	.30		.28	1.03	.17					.04					T.	2.53
Parsons	Monongahela									.25				.20		.23			.22								.09					0.99
Philippi	do									.22				.21		.27	.93	.47		.75	.40											3.25
Pickens	do									.89	.28			.31		.10	.12	.26	.05	.44	.26						T.				.15	2.86
Rowlesburg |||	do										.94				.22		1.00	.62		.84	.14	T.					T					3.76
Saint Marys |||	Ohio			T.							.33			T.	.03		.55	.05		1.12	.14	.22	T.				.07					2.51
Smithfield |||	Fishing Creek										.25			.15			.75	.25		1.30	.10	.22					.05					3.07
Terra Alta	Monongahela																																
Wellsburg	Ohio									.25				.25		T.	.41			2.13	.14					.05							3.23
Weston	Monongahela									.70	.07			.10		.06	.60	.68		.86	.50												3.57
Wheeling |||	Ohio									T.	.30			T.	.28	T.	.25	.04		1.25	.27	.24					.05					2.68
Southern Division.																																	
Bancroft |||	Great Kanawha										.10						.12	.28		1.15	.11												1.76
Beckley	do									.61							.50	.62	.58		.16												2.47
Bluefield	do																.89	.56	.30	.50													2.16
Charleston |||	do										.50			T.			.20	.25		1.10	.20	T.									.20	2.45
Clay |||	do										.20				.18			.25	T.		.30											0.93
Cuba	Sand Creek																																
Dam 22 O. R. |||	Ohio														.11		.29	.09		1.49	.03	.14					.05					2.20
Dam 26 O. R. |||	do										.10						.19	.03		1.37	.04	.10										1.83
Dunlow	Big Sandy																																
Elkhorn	do									.38						.52	.39	.78	.33		.01						.10				.12		2.63
Evans	Ohio									.47					T.	.06	.31		.13	1.57	.28					.02			T.			2.84
Green Sulphur Spgs.	Great Kanawha								.30								.45			.30											.20		1.25
Hinton |||	do									.04	.12				T.		.10	.70		.80						T.				.20	.04	2.00
Holcomb	do									.52				.36		*	*	.38	*	.47	.60										.22	T.	2.55
Huntington |||	Ohio										T.			T.	T.		.26	.26		1.36	.08	.24					T.					2.20
Kaylord |||									.12	.58						T.			.08	.69		.69		.31		.08				.02	2.57
Lanes Bottom |||	Great Kanawha									.60				.22			.25		.52		.25											1.84
Lewisburg	do									.18				T.		T	T.	.84	T.	.56	T.										.18	1.76
Logan	Guyandotte																																
Madison |||																																
Marlinton	Great Kanawha									.16				.21		.13	.33	T	.13	.76	.10										.08	T.	1.90
Nuttallburg	do																																
Point Pleasant |||	Ohio									.06	.06						.30			1.58	.14	.12					.03					2.29
Powellton																																	
Rainelle	Great Kanawha									T.	.27				.86																.27	T.	1.40
Raleigh |||	do									.30	.25						.04	1.22				.14					.03				.08	.03	2.09
Renick |||	do																.70			.50													1.20
Robertsburg |||	do																.28	.19		1.40	.29	.08											2.24
Ryan	do									.62	.03			.16		.08	.13		.15	1.11	.38					.01	.01				.02	.13	2.83
Sissonville |||									T.				T.		.17	.38		.20		.16										T		0.91
Spencer |||	Little Kanawha									T.							.28	.11		1.27		.40											2.09
Sutton |||	Great Kanawha																																
Union |||	do										.10			.05		.10	.75	T.	.70												.20		1.90
White Sulphur Spgs.	do										.35					T.	.76		1.25												.28		2.64
Williamson |||	Big Sandy										.10				.04		.15	1.10	T.	.96	.02	.20									.06		2.63

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for October, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Division.																																	
Bayard	Maximum	56	57	62	64	73	76	78	79	65	56	63	64	56	54	60	60	61	48	68	70	47	48	55	65	67	59	59	60	63	66	65	62.1
	Minimum	27	29	31	38	43	48	52	50	55	30	25	28	40	32	31	42	41	25	37	46	33	31	22	28	35	34	27	30	30	35	36	35.2
Brandywine	Maximum	65	67	75	72	77	83	87	87	81	70	65	71	64	65	63	74	72	59	71	75	69	53	63	70	69	67	69	72	68	69	72	70.5
	Minimum	31	26	33	40	46	47	47	48	55	44	25	27	36	33	28	55	58	26	43	55	33	35	23	25	30	22	25	27	29	44	38	36.6
Burlington	Maximum	56	65	70	70	80	82	81	86	80	63	56	68	64	60	53	60	69	55	65	77	55	44	57	63	72	63	66	64	65	66	67	65.9
	Minimum	30	28	35	35	40	43	44	48	57	37	29	30	35	33	29	49	38	27	45	54	42	39	25	26	29	38	24	24	28	37	36	55.9
Martinsburg§	Maximum	62	67	62	74	78	85	82	88	81	58	65	69	62	62	66	68	61	57	72	77	57	53	59	62	67	61	63	64	64	63	64	66.9
	Minimum	36	32	33	44	45	55	57	50	52	43	32	35	36	43	32	35	55	31	32	53	43	42	30	31	32	35	31	31	33	35	44	39.3
Moorfield	Maximum	67	71	71	77	83	90	89	97	82	75	70	75	65	66	62	65	71	57	72	82	68	55	63	74	77	66	74	72	73	70	71	72.6
	Minimum	33	33	35	39	47	50	51	63	55	43	30	32	39	33	29	53	55	26	45	56	36	41	29	30	32	37	24	28	27	40	40	39.1
Piedmont	Maximum	59	63	65	69	73	82	79	85	77	66	63	67	60	58	52	57	65	51	61	76	65	62	64	59	69	59	65	62	63	66	63	65.3
	Minimum	31	30	33	36	41	49	49	45	52	39	28	29	35	33	29	46	47	27	43	53	42	35	31	27	30	41	25	29	29	37	39	36.8
Romney	Maximum	60	66	63	72	80	85	83	89	85	80	70	70	....	62	60	62	71	56	66	80	60	52	58	65	74	68	68	69	67	68	74	69.4
	Minimum	29	28	35	47	45	48	50	47	58	43	28	37	....	36	28	49	50	25	45	55	42	40	25	27	29	44	25	30	29	38	38	38.3
Upper Tract	Maximum	70	69	65	66	77	83	85	90	88	80	79	70	68	63	65	75	71	72	72	75	71	67	66	68	72	68	68	....	69	68	74	72.5
	Minimum	25	23	28	33	40	46	45	47	50	37	22	25	42	33	35	55	55	27	26	57	38	37	25	27	34	26	24	....	28	45	38	35.8
Northern Division.																																	
Bens Run	Maximum	70	76	77	82	87	87	87	86	70	60	66	73	67	68	60	65	67	60	71	69	45	57	69	74	73	67	65	69	75	78	71	70.7
	Minimum	38	39	38	40	46	52	52	51	51	40	35	36	43	38	35	51	41	35	48	44	41	36	32	34	36	40	30	34	37	43	43	40.6
Buckhannon	Maximum	66	71	74	76	79	78	80	82	72	57	58	67	60	57	66	62	65	60	75	77	52	47	62	65	72	55	63	61	69	70	68	66.6
	Minimum	32	32	31	37	46	50	49	49	56	36	29	30	40	35	33	51	50	33	49	52	40	37	27	30	34	41	26	29	29	37	39	38.7
Creston	Maximum	72	78	81	84	86	89	90	91	79	64	68	72	67	67	64	67	67	62	76	73	49	65	70	74	74	60	68	72	75	78	71	72.4
	Minimum	32	39	33	35	44	51	50	49	59	39	29	29	39	35	31	52	47	31	50	49	41	39	26	29	33	41	25	29	34	43	39	38.8
Elkins	Maximum	67	69	74	73	80	82	84	86	72	54	60	70	62	57	66	68	65	58	73	76	42	48	67	68	75	54	65	70	72	71	68	67.6
	Minimum	31	30	30	38	44	50	50	50	48	32	27	30	36	32	29	51	32	29	47	40	36	28	25	28	32	29	24	28	35	42	39	35.5
Fairmont§	Maximum	75	79	83	84	88	89	88	92	77	59	68	75	62	66	65	65	61	60	76	81	44	53	70	72	75	60	66	72	76	78	69	71.9
	Minimum	35	33	34	35	42	48	51	49	52	41	31	32	34	36	32	40	52	35	38	53	41	38	29	30	32	36	27	30	33	35	41	37.9
Glenville	Maximum	75	80	82	89	90	90	93	93	91	72	69	76	68	75	66	69	68	64	79	79	58	59	73	76	78	71	70	77	79	81	75	76.3
	Minimum	35	38	36	38	41	51	51	52	57	43	32	32	38	35	33	53	55	32	50	53	42	39	29	36	31	39	25	29	30	41	41	39.9
Grafton	Maximum																																
	Minimum																																
Lost Creek	Maximum	68	74	77	80	86	87	87	88	75	60	65	72	63	63	65	64	65	63	76	77	50	53	68	72	74	64	65	70	74	74	69	70.6
	Minimum	29	30	28	33	38	50	48	45	56	42	26	26	37	31	28	51	48	30	48	50	40	38	23	26	30	42	25	28	28	40	39	36.5
Mannington	Maximum	66	72	76	79	80	83	81	86	76	60	63	72	62	61	62	61	66	61	75	76	51	48	67	70	74	64	65	68	73	74	68	69.0
	Minimum	30	30	29	33	40	49	47	44	54	37	28	27	37	31	28	49	48	29	46	50	41	38	24	27	31	41	24	25	29	36	39	36.2
Morgantown	Maximum	66	69	75	76	82	90	82	87	79	56	63	71	63	60	64	62	65	55	76	78	51	45	65	68	72	63	64	67	72	74	68	68.6
	Minimum	35	43	46	47	53	60	50	54	55	37	29	34	52	35	35	48	47	35	43	45	40	36	30	35	42	41	30	33	45	51	46	42.3
New Cumberland	Maximum	67	73	76	82	84	88	85	90	79	59	67	73	62	64	63	61	66	59	68	70	46	48	63	63	71	58	63	72	75	..	73	68.9
	Minimum	26	28	28	31	41	49	37	45	49	29	29	24	48	31	28	47	38	24	40	43	36	35	22	27	33	37	23	26	39	..	38	34.4
New Martinsville	Maximum	72	79	81	82	83	88	87	90	85	76	70	75	67	66	60	64	67	65	75	75	70	64	66	73	73	65	65	71	77	78	74	73.6
	Minimum	36	39	38	40	45	55	51	51	56	40	32	35	42	38	32	51	46	34	50	55	42	40	30	32	36	42	28	34	39	42	41	41.1
Parkersburg	Maximum	68	72	74	81	83	86	86	88	77	56	63	70	67	60	61	67	65	60	74	70	43	50	63	69	71	55	66	67	74	76	71	68.8
	Minimum	37	38	37	40	49	58	55	54	51	39	32	34	50	40	37	52	42	37	49	42	40	37	32	33	43	36	31	33	42	48	47	41.8
Parsons	Maximum	66	68	72	74	79	81	81	84	69	72	62	72	57	57	63	63	65	59	74	77	48	50	66	68	75	57	65	70	71	72	72	68.0
	Minimum	31	28	29	29	39	40	49	39	51	32	28	29	33	30	27	42	37	29	38	47	38	32	23	25	30	34	32	25	27	37	37	33.8
Philippi	Maximum	70	73	75	79	82	83	84	85	77	67	60	70	62	60	67	64	67	62	75	70	55	50	65	63	74	62	66	73	73	80	65	69.0
	Minimum	31	34	35	37	43	53	52	54	62	39	30	31	47	35	33	50	47	35	33	39	40	36	31	33	41	41	30	42	41	43	46	40.1
Pickens	Maximum	73	76	80	84	78	77	79	83	65	69	67	71	58	68	68	65	65	57	73	72	54	61	72	75	84	65	73	...	80	80	66	71.3
	Minimum	32	32	32	40	51	51	53	52	54	31	28	28	42	32	41	50	40	29	46	40	35	30	29	33	40	30	25	....	39	47	42	38.5
Terra Alta	Maximum																																
	Minimum																																
Wellsburg	Maximum	64	70	71	74	77	80	78	83	74	53	59	65	56	57	63	62	65	56	70	67	56	45	59	62	67	53	58	60	67	69	67	64.7
	Minimum	34	39	39	43	50	60	46	56	50	33	33	37	55	39	38	49	40	34	45	40	37	36	30	35	41	39	31	35	41	47	46	41.2
Weston	Maximum	70	75	79	82	79	84	85	87	78	72	63	71	62	62	66	67	67	63	76	79	52	49	64	70	74	70	66	70	74	73	72	71.0
	Minimum	34	34	32	37	44	52	52	54	59	34	31	31	42	35	33	52	51	34	48	51	41	38	29	31	34	43	28	29	30	43	41	39.6
Wheeling§	Maximum	75	83	83	88	91	91	87	94	80	64	70	77	61	67	65	61	64	63	73	72	44	54	68	68	51	75	62	67	71	78	80	74	72.0
	Minimum	33	34	36	37	40	46	47	49	49	38	33	34	35	35	33	35	45	32	34	50	32	39	30	31	34	37	29	28	33	34	40	36.9
Southern Division.																																	
Beckley	Maximum	70	70	69	73	78	79	80	79	81	79	78	80	79	80	80	79	74	75	75	73	53	60	71	70	68	69	68	69	69	68	69	73.1
	Minimum	32	44	45	32	53	46	47	45	41	42	29	30	32	31	34	36	35	37	55	39	30	31	30	30	29	28	31	28	31	32	31	36.0
Bluefield	Maximum	61	68	69	70	69	77	83	84	85	68	65	70	71	70	77	70	70	70	72	73	72	72	73	73	73	72	73	73	75	73	66	72.2
	Minimum	35	34	35	40	57	49	50	51	53	42	30	34	46	42	44	57	57	41	42	53	37	35	34	34	41	37	30	34	46	52	44	42.5
Charleston	Maximum	79	79	79	83	87	89	90	91	89	82	80	79	76	76	74	72	69	68	80	78	76	74	73	73	78	76	74	76	80	80	80	78.7
	Minimum	38	39	37	38	40	52	51	53	60	44	34	30	35	40	38	51	51	35	39	59	38	32	32	31	33	36	29	29	33	48	46	40.5
Elkhorn	Maximum	64	68	69	70	70	78	81	82	78	67	62	69	66	63	65	62	63	62	73	71	60	53	66	69	70	69	66	67	71	69	67	68.1
	Minimum	38	41	39	43	61	52	53	52	60	46	32	38	47	43	42	58	60	44	45	58	42	38	36	37	43	41	32	35	45	54	47	45.1
Green Sulphur Spgs.	Maximum	66	70	70	72	75	81	84	77	81	85	66	72	65	65	59	67	62	76	76	74	53	57	67	73	74	66	67	68	72	71	72	70.4
	Minimum	31	29	30	32	34	48	50	50	52	48	27	28	46	33	28	49	32	43	40	42	38	34	30	25	29	38	21	25	28	42	43	36.1
Hinton§	Maximum	66	68	71	75	74	81	83	84	78	59	64	70	65	64	60	66	66	56	74	76	56	55	63	68	73	57	67	67	69	68	68	68.1
	Minimum	38	36	36	38	43	55	55	53	53	46	35	36	37	42	35	49	53	46	42	52	41	38	31	33	35	38	28	32	32	33	49	40.7
Holcomb§	Maximum	71	77	78	80	83	84	88	80	70	58	66	71	64	60	66	71	63	57	74	76	43	55	68	72	72	57	67	66	64	70	72	69.1
	Minimum	31	30	29	34	40	46	48	47	46	40	28	29	34	35	31	38	52	31	44	53	38	32	28	29	30	39	24	28	30	34	38	36.0
Huntington§	Maximum	66	69	71	74	79	82	81	83	79	57	61	68	70	61	58	69	59	60	73	67	44	51	61	65	69	55	66	66	72	71	71	67.0
	Minimum	38	40	39	41	43	52	56	54	60	45	35	34	38	41	38	43	55	40	41	54	42	33	33	34	36	37	30	31	36	45	46	41.6
Lewisburg	Maximum	64	68	69	72	71	82	83	85	75	69	66	69	60	66	59	67	63	63	73	73	59	57	63	71	71	62	64	67	65	69	67	68.1
	Minimum	31	30	32	41	54	49	50	47	54	46	26	28	33	37	31	52	35	35	40	52	38	35	27	27	33	38	22	27	29	33	41	37.2
Madison§	Maximum																																
	Minimum																																
Marlinton	Maximum	58	60	66	68	70	76	78	82	68	58	56	60	58	64	60	64	58	46	66	68	58	48	60	62	64	54	56	58	66	62	64	62.5
	Minimum	30	30	28	34	42	48	48	44	50	24	24	26	30	34	26	54	40	28	40	46	34	28	22	24	28	32	16	20	30	38	38	33.4
Point Pleasant	Maximum	73	77	78	84	88	89	90	90	81	62	68	75	74	65	61	67	67	61	76	68	45	55	67	70	74	59	70	72	78	78	73	72.1
	Minimum	31	36	35	36	45	52	49	50	59	38	30	31	46	34	32	51	47	31	47	42	38	36	25	29	34	34	26	29	33	44	41	38.4
Powellton	Maximum																																
	Minimum																																
Robertsburg§	Maximum	75	85	80	83	85	89	90	90	81	61	68	77	72	66	62	68	63	62	76	70	46	57	68	73	73	59	69	75	78	79	78	72.8
	Minimum	38	39	37	38	43	55	55	51	56	45	34	34	38	..	40	44	56	..	..	56	42	..	..	..	34	34	29	30	32	46	44	42.0
Ryan	Maximum	66	70	70	82	81	85	88	88	76	65	70	72	70	70	63	62	70	68	75	69	54	70	67	66	72	60	59	80	79	79	76	71.7
	Minimum	29	30	28	30	41	47	49	43	55	40	28	27	36	30	30	50	30	30	40	48	46	40	40	25	26	30	30	23	25	30	40	35.3
Spencer§	Maximum	62	67	80	86	87	86	87	87	88	78	68	75	70	65	54	66	52	62	76	75	45	57	71	75	79	75	74	77	75	80	78	72.8
	Minimum	29	35	28	40	46	48	46	48	50	50	25	26	32	30	50	48	52	28	32	40	35	27	24	26	30	30	25	23	28	33	43	35.9
Union§	Maximum	69	70	71	72	83	86	86	86	80	72	70	65	76	78	77	65	62	67	72	69	68	77	71	72	69	65	69	70	72	68	..	72.6
	Minimum	33	31	34	34	35	45	49	45	45	45	30	32	38	39	35	37	38	40	38	36	38	30	29	28	35	39	23	23	31	33	41	35.8
White Sulphur Spgs.	Maximum	75	76	78	76	77	76	78	80	78	74	72	70	68	71	70	68	67	71	69	67	68	54	56	58	55	56	55	60	58	66	69	68.3
	Minimum	45	44	45	48	49	50	50	49	50	44	38	43	40	44	45	38	40	35	47	35	40	37	38	32	37	33	32	40	30	35	36	40.9
Williamson§	Maximum	71	73	75	79	84	85	87	87	80	63	65	73	69	66	60	68	66	61	75	77	48	58	69	71	76	60	70	72	76	71	72	71.2
	Minimum	40	41	42	43	45	53	61	58	62	51	40	40	42	44	45	46	60	45	47	56	45	38	36	36	40	40	33	34	39	42	53	45.3

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, October, 1916



U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY

JAN 3 1917

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

NOVEMBER, 1916

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
DECEMBER 20, 1916

Departure of the Mean Temperature from the Normal, November, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

F

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXIV. PARKERSBURG, W. VA., NOVEMBER, 1916. No. 11.

GENERAL SUMMARY.

November was sunshiny, somewhat warmer, and much drier than usual. The rainfall, however, was favorably distributed. Measurable amounts of snow were received only in the more elevated or northern counties, although snow flurries occurred in nearly all other sections on the 14th and 24-25th. The conditions were exceptionally favorable for outdoor work. At the close of the month, wheat, pastures, and meadows were in good condition.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.18 and 30.20 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.54 inches on the 26th, and 29.37 inches on the 23d. Elkins, 30.56 inches on the 26th, and 29.32 inches on the 23d.

TEMPERATURE.

The monthly mean for the State, 46 stations reporting, was 43.8°. The mean departure from the normal for 40 stations having ten or more years of record was +1.2°. The month opened with the temperatures about normal, but unseasonably warm weather prevailed from the 6th to the 9th, 11th to the 13th, 20th to the 23d, and on the 29th, with the highest temperatures occurring generally on the 8th and 9th. The temperatures were abnormally low from the 14th to the 18th and on the 25th and 26th, with the lowest readings generally on the 16th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 78 per cent; 8 p. m., 67 per cent. The November averages for the same hours for the past 28 years are 81 and 72 per cent, respectively. Elkins, 8 a. m., 82 per cent; 8 p. m., 72 per cent. The November averages for Elkins for the same hours for the past 16 years are 84 and 73 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 63 stations reporting, was 1.77 inches. The departure from the normal for 44 stations having ten or more years of record was —0.77 inch. The precipitation was heaviest over the northwest counties and lightest over the eastern panhandle section. Scattered and light showers occurred on the 4th and light to moderate rains fell in most sections on the 9-10th, 12th, 23d-24th, and 28-29th, the amounts being heaviest on the 23d. Snow flurries or light snow occurred in many sections on the 14th and 24-25th. Amounts exceeding a trace were received at only ten stations and the greatest fall for the month, 4 inches, was at Pickens, Randolph county.

WIND.

The average wind velocity at Parkersburg was 6.1 miles per hour, or normal, as compared with the November average for the past 26 years. The average at Elkins was 3.9 miles per hour, or 0.5 mile below the November average for 17 years. The highest velocity at Parkersburg was 32 miles per hour from the northwest on the 9th, and at Elkins 26 miles per hour from the west on the 23d.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 47 per cent of the possible amount, or 12 per cent above the November average for 19 years. The average at Elkins was 53 per cent, or 16 per cent above the November average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 11th, 12th, and 13th; Charleston, 3d, 4th, 6th, 7th, 8th, 11th, 13th, 20th, 21st, 22d, and 27th; Dam No. 22, 6th, 10th, and 11th; Elkins, 6th, 8th, 9th, and 22d; Green Sulphur Springs, 8th; Hogsett, 3d, 5th, 6th, 10th, 11th, and 22d; Hinton, 21st; Huntington, 3d; Kayford, 6th and 7th; Lewisburg, 8th and 13th; Mannington, 5th, 6th, 8th, and 10th; New Cumberland, 3d, 6th, 7th, 8th, 10th, 11th, 12th, and 22d; Parkersburg, 5th; Robertsburg, 5th, 10th, and 11th; Romney, 1st, 3d, 7th, 8th, 9th, 10th, and 13th; St. Marys, 5th and 6th; Williamson, 3d, 6th, 8th, 11th, and 13th.

Hail: Bayard, 4th; Marlinton, 23d.

Haze: Bayard, 3d, 6th, and 7th; Lost Creek, 4th, 5th, 6th, 7th, 8th, 9th, and 21st; Parkersburg, 21st.

Sleet: Bayard, 14th and 23d; Bens Run, 4th; Dunlow, 22d; Holcomb, Nuttallburg, and White Sulphur Springs, 14th.

Smoke: Hogsett, 6th, 7th, and 8th; Lost Creek, 21st and 22d.

Thunderstorms (dates and number of stations reporting): 1st, 3; 4th, 6; 5th, 1; 23d, 1.

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	42.5	80	8	3.04	....	....	....	..	..	..
1892	41.7	81	3	3.10	....	....	....	..	..	..
1893	41.4	74	3	2.12	3.22	0.47	....	13	6	11
1894	39.8	82	5	2.11	3.47	0.25	....	12	6	12
1895	44.6	87	12	2.35	4.00	0.20	....	12	8	10
1896	46.1	80	10	3.50	5.07	1.56	...	10	8	12
1897	45.0	76	13	4.45	7.15	0.30	....	9	9	12
1898	41.4	75	−3	2.84	4.74	1.00	....	9	11	10
1899	45.6	76	14	1.93	3.49	0.20	T.	11	8	10
1900	45.5	86	9	5.20	8.88	2.71	2.8	8	8	14
1901	38.0	79	7	2.51	5.35	1.23	4.3	8	8	16
1902	50.3	83	12	3.27	4.56	1.23	0.7	11	6	13
1903	38.0	80	−4	2.46	4.98	0.67	4.6	11	8	11
1904	41.2	75	9	0.64	3.05	0.07	1.4	12	7	11
1905	41.8	74	10	2.44	5.67	0.67	T.	13	7	10
1906	44.2	84	13	2.39	5.50	0.35	2.2	15	5	10
1907	41.8	74	13	3.40	7.05	1.41	1.0	10	8	12
1908	43.3	81	0	1.14	2.73	0.48	5.2	15	8	7
1909	49.1	84	12	1.34	3.85	0.23	0.2	14	7	9
1910	37.3	75	5	1.95	4.41	0.66	1.8	8	7	15
1911	40.5	83	7	2.74	5.54	1.27	2.0	10	7	13
1912	42.8	78	2	1.69	4.08	0.40	0.9	14	7	9
1913	44.5	82	−1	4.49	7.50	0.61	13.4	12	5	13
1914	42.6	84	2	1.32	2.27	0.50	2.9	16	6	8
1915	45.2	85	11	3.06	5.99	1.15	1.1	13	8	9
1916	43.8	81	8	1.77	3.07	0.75	0.3	16	5	9
Means and Extremes	43.1	87	−4	2.59	8.88	0.07	2.5	12	7	11

Climatological Data for November, 1916.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	39.2	+0.7	69	9	8	16	39	1.62	−1.09	0.57	3.2	11	11	6	13	w.	G. C. Dixon.
Brandywine	Pendleton		0	43.6	.....	72	9	15	16	42	0.78	.....	0.42	0.0	4	20[a]	5[a]	4[a]	s.	Elmer Keister.
Burlington	Mineral	875	22	40.6	−1.7	74	9	14	17	46	1.32	−0.44	1.00	0.0	3	14	15	1	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27	.....	.....	.....	.....	.....	.....	.....	1.18	−1.10	0.57	0.0	3	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	24	43.8	+0.9	75	9	22	26†	40	1.37	−0.79	0.50	0.0	5	19	5	6	n.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	45.0	+1.5	79	9	11	19	52	0.82	−0.84	0.45	0.0	2	27	0	3	.....	M. S. Henkel.
Piedmont	Mineral	919	0	40.3	.....	73	9	15	16†	42	1.50	.....	0.82	T.	5	11	17	2	se.	C. A. Suter, Jr.
Romney	Hampshire	824	19	44.4	+1.8	80	9	15	17	52	1.69	−0.29	0.75	0.0	4	11	15	4	w.	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	46.2[b]	+1.5	75[b]	8	16[b]	17	42[b]	0.75	−0.94	0.60	0.0	2	19	7	4	.....	J. M. Mallow.
Averages and	Extremes	.....	.....	42.9	+0.8	80	9	8	16	52	1.23	−0.81	1.00	0.4	4	16	9	5	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	44.6	+1.4	74	8	19	16	38	2.10	−0.50	0.68	0.5	8	19	5	6	.....	J. D. Riggs.
Brandonville	Preston	1,809	6	.....	.....	.....	.....	.....	.....	.....	2.98	.....	1.27	.....	4	.....	.....	.....	.....	W. T. Miller.
Buckhannon	Upshur	1,411	20	41.8	+0.3	70	8	17	16	41	2.77	+0.62	1.07	T.	6	17	3	10	.....	H. A. Darnall,
Cairo	Ritchie	674	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Van A. Zevely.
Central Station	Doddridge	950	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. H. Doak.
Cheat Bridge	Randolph	3,600	4	.....	.....	.....	.....	.....	.....	.....	1.11	.....	0.50	.....	5	.....	.....	.....	.....	Walter Cole.
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	1.47	.....	0.79	.....	1	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	15	44.4	+0.7	76	9	18	17†	46	1.84	−0.65	0.57	T.	8	18	2	10	sw.	J. M. Reed.
Davis	Tucker	3,093	8	.....	.....	.....	.....	.....	.....	.....	2.74	.....	0.75	3.5	12	11	3	16	sw.	Ross C. Male.
Elizabeth	Wirt	646	5	.....	.....	.....	.....	.....	.....	.....	1.71	.....	0.60	.....	6	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,940	16	41.6	+2.0	75	8	15	16	43	1.50	−1.36	0.64	T.	12	11	8	11	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	43.3	+0.5	76	8	16	16	44	1.87	−0.85	0.63	T	11	17	0	13	w.	F. P. Hall.
Glenville	Gilmer	738	23	45.4	+1.9	80	7†	12	19	49	1.82	−1.21	0.73	T.	5	15	6	9	w.	M. T. Brannon.
Grafton	Taylor	1,000	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. W. Leith.
Lost Creek	Harrison	1,026	19	43.6	+1.4	74	7†	13	16	47	1.87	−0.61	0.91	T.	6	20	2	8	w.	Allen Smith.
Mannington	Marion	974	14	42.2	+1.1	74	8	14	16	44	2.11	0.34	0.62	0.7	9	13	7	10	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	45.8[a]	+2.4	72	7†	14[a]	16	29[a]	2.94	+0.05	0.81	T.	8	16	1	13	sw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	14	48.8	+5.6	76	2	14	21	44	1.51	−0.21	0.60	.....	5	14	3	13	nw.	M. Z. White.
New Cumberland	Hancock	987	19	42.5	+1.2	76	9	13	26	41	2.92	+0.12	0.66	2.7	8	13	9	8	sw.	M. F. Smith,
New Martinsville	Wetzel	634	23	45.6	+1.0	74	8	16	16	39	2.23	−0.40	0.58	.....	8	16	5	9	s.	Wm. Ankrom,
Parkersburg	Wood	638	28	45.5	+2.3	74	4	22	16	36	1.84	−0.99	0.76	T.	5	11	6	13	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	40.4	−0.8	74	8	11	15	49	1.58	−1.00	0.78	0.5	4	13	7	10	.....	J. W. Swisher.
Philippi	Barbour	1,149	20	45.4	+2.2	73	8†	14	16	43	1.52	−1.58	0.60	.....	4	18	12	0	w.	Okey J. Robinson.
Pickens	Randolph	2,697	14	43.6	+3.0	79	8	13	15	49	1.95	−1.93	0.82	4.0	9	14	6	9	w.	Dr. J. L. Cunningham,
Rowlesburg	Preston	1,375	30	.....	.....	.....	.....	.....	.....	.....	2.59	−0.45	1.03	0.0	7	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	8	.....	.....	.....	.....	.....	.....	.....	1.97	.....	0.52	.....	8	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	11	46.2	+5.2	78	12	20	16†	38	2.15	−0.70	0.51	T.	9	16	9	5	se.	G. M. Whisler.
Terra Alta	Preston	2,612	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. F. Dodge.
Wellsburg	Brooke	1,225	16	42.4	+1.2	68	8†	16	16	28	2.76	+0.68	0.92	T.	7	16	8	6	w.	C. P. Waugh.
Weston	Lewis	1,026	21	46.3	+3.0	75	8	17	16	41	1.96	−1.02	0.65	T.	8	13	5	12	.....	Weston State Hospital.
Wheeling	Ohio	645	30	43.4	.....	77	8	17	16	43	3.07	+0.64	1.06	0.5	10	17	5	8	sw.	Miss M. B. Forsyth.
Averages and	Extremes	.....	.....	44.1	+1.9	80	7†	11	15	49	2.10	−0.62	1.27	0.7	7	15	5	10	w.	
Southern Division.																				
Bancroft	Putnam	574	12	44.9	−0.1	76	8†	19	16†	47	1.72	−0.86	0.72	T.	6	21	0	9	ne.	R. E. Dent.
Beckley	Raleigh	2,440	16	46.0	+3.4	80	7†	16	15†	49	1.40	−1.17	0.58	0.0	4	23	3	4	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	44.9	+0.4	71	8	15	16	35	1.85	−0.63	1.30	0.0	3	21	0	7	.....	Norfolk & Western Ry
Charleston	Kanawha	597	13	50.7	+2.6	81	1	22	19†	50	1.96	−0.96	0.71	T.	7	10	0	20	w.	C. V. Lewis.
Clay	Clay	706	0	.....	.....	.....	.....	.....	.....	.....	1.55	.....	0.48	T.	9	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba	Jackson	650	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. T. Perry.
Dam 22 O. R.	Jackson	538	1	.....	.....	.....	.....	.....	.....	.....	2.13	.....	0.60	0.0	6	.....	.....	.....	w.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0	.....	.....	.....	.....	.....	.....	.....	1.07	.....	0.54	T.	5	.....	.....	.....	sw.	U. S. Engineer Office.
Dunlow	Wayne	703	8	.....	.....	.....	.....	.....	.....	.....	1.41	.....	1.03	0.5	4	21	1	8	s.	James W. Damron.
Elkhorn	McDowell	1,933	23	47.5	+1.7	70	8†	19	16†	58	1.38	−1.25	0.36	0.0	6	14	8	8	w.	J. J. Lincoln.
Evans	Jackson	606	0	.....	.....	.....	.....	.....	.....	.....	1.91	.....	0.55	T.	6	16	2	12	.....	B. F. Sayre.
Green Sulphur Spgs	Summers	1,600	20	43.8	+1.2	73	4†	11	26	49	1.48	−0.61	0.45	T.	5	17	3	10	n.	W. H. Gwinn.
Hinton	do	1,450	19	42.4	−2.0	73	9	16	26	41	1.06	−1.13	0.38	T.	8	17	2	11	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	42.2	.....	76	9	14	26	46	1.84	.....	.....	1.0	10	15	4	11	.....	R. C. Ferguson.
Huntington	Cabell	538	20	44.8	+1.1	73	4	21	15†	41	1.04	−1.74	0.42	0.0	5	19	2	9	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	0	.....	.....	.....	.....	.....	.....	.....	2.06	.....	0.65	T.	11	.....	.....	.....	.....	Cabin Creek Con. Coal Co
Lanes Bottom	Webster	2,062	0	.....	.....	.....	.....	.....	.....	.....	1.91	.....	0.90	T.	4	7	0	23	n.	C. A. Droddy.
Lewisburg	Greenbrier	2,200	16	42.0	+0.6	70	9	14	17†	43	1.58	−0.72	0.56	0.0	4	11	12	7	sw.	Geo. T. Argabate.
Logan	Logan	687	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	37.2	−1.1	68	8	10	17	42	1.75	1.06	0.74	T.	9	9	13	8	nw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23	39.4	.....	65	4†	15	16	45	1.58	−0.86	0.50	T.	4	14	4	4	.....	Miss Donna Tully.
Point Pleasant	Mason	553	23	44.8	−0.4	76	8	18	16	44	1.82	−1.02	0.45	T.	8	17	4	9	sw.	W. D. Holmes.
Powellton	Fayette	933	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. C. Lampert.
Rainelle	Kanawha	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Guthrie.
Raleigh	Beckley	2,130	0	.....	.....	.....	.....	.....	.....	.....	1.53	.....	0.69	0.0	6	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	0	.....	.....	.....	.....	.....	.....	.....	2.00	.....	1.00	0.0	4	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	16	44.6	+1.2	76	7†	19	16†	45	1.43	−0.98	0.47	0.0	5	9	2	19	.....	E. C. Brace, Jr.
Ryan	Roane	700	13	42.2	−1.2	76	6	16	16†	51	1.87	−0.66	0.50	T.	8	16	7	7	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	0	.....	.....	.....	.....	.....	.....	.....	1.40	.....	0.55	T.	3	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	12	47.0	+3.7	84	12	18	26	53	1.85	−0.59	0.65	T.	4	3	19	8	.....	A. M. McKown.
Sutton	Braxton	839	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ben Gillespie.
Union	Monroe	2,250	12	41.0[a]	+0.7	72[a]	11	14	26	47[a]	1.30	−0.79	0.40	0.0	4	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	41.3	.....	75	9	13	17†	47	1.95	.....	0.50	T.	6	21	1	8	w.	J. M. Ayres.
Williamson	Mingo	660	16	46.9	+1.6	76	8	19	16	40	1.67	1.00	0.48	0.0	8	22	4	4	w.	J. F. Keyser.
Averages and	Extremes	.....	.....	43.7	+0.6	84	12	10	17	51	1.62	−0.97	1.30	0.1	6	16	4	10	w.	
State Averages and	Extremes	.....	.....	43.7	+1.2	84	12	8	16	52	1.76	0.77	1.30	0.3	6	16	5	9	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

◇ Approximated by the observer.

Daily Precipitation for November, 1916.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac				.05						.29		.10		.15	.04	T	T.	.03					.57	.02	.02	T.		T.	.18	.17		1.62
Brandywine	do										.15		.06											.42					T.	T.	.15		0.78
Burlington	do				16								T.											1.00						.16			1.32
Harpers Ferry	do										.10			T.										T.	.57					.51			1.18
Martinsburg	do				.30					.05			.04											.50						.48			1.37
Moorefield	do																							.45							.37			0.82
Piedmont	do				.82						.06													.52	.02	T.				.08			1.50
Romney	do				.75								.05											.65						.24			1.69
Upper Tract	do												T.											.60						.15			0.75
Northern Division.																																	
Bens Run	Ohio				.13					.29	.23				.35									.68	.09				.25	.08			2.10
Brandonville	Monongahela																							1.25	1.27					.02	.44		2.98
Buckhannon	do									T.	.62		.10		.27	T		T.	T.					1.07	.35				T.		.36		2.77
Cairo	Little Kanawha																																
Central Station	Middle Is. Creek																																
Cheat Bridge		.50									.30		.08												.15						.08		1.11
Cortland	Monongahela										.39	.11													.79						.18		1.47
Creston	Little Kanawha	.06									.57				.20	T.								.25	.28					.03	.38	.07		1.84
Davis	Monongahela	.12				.04					.43			.10	.10	T.	.10		.10					.40	.75	.10				.30	.20		2.74
Elizabeth	Little Kanawha										.60				.21	.04								.23	.30					.33			1.71
Elkins***	Monongahela				.01					.26	.04		.13	T.	.11	.02	T.	.02	.04					.51	.16	T.			.06	.14			1.50
Fairmont	do	.09			.02	.03					.51			T.	.17	T.	T.		.04					.17	.63	.02	T			.08	.11		1.87
Glenville	Little Kanawha										.42				.20									.15	.73					.32			1.82
Grafton	Monongahela																																
Lost Creek	do									T.	.46		T.	T.	.18	T.								.65	.26				.04	.28	T.		1.87
Mannington	do	.02			.14					.06	.41				.30	T								.62	.34	T			.05	.17	T.		2.11
Morgantown	do	.06			.81					.10	.39				.40	T.								.77	.31	T.			T.	.10			2.94
Moundsville	Ohio														.37									.60	.13				.14	.27			1.51
New Cumberland	do				.47					.39					.37			T.						.66	.22	.05			.47	.29			2.92
New Martinsville	do				.18					.30	.15				.37									.58	.20				.30		.15		2.23
Parkersburg ***	Ohio									.39				T.	.25	T.		T.						.76	T.	T.			.29	.15			1.84
Parsons	Monongahela								.50			T.	T.	.78	.05								T.	T.				.25					1.58
Philippi	do										.25				.07									.40	.60								1.32
Pickens	do				T.					.27			.13	.17	.10			T.	.10					.82	.11	.10			T.	.15			1.95
Rowlesburg	do					.12					.60			T.	.30	T			.14					T.	1.03	.08					.32		2.59
Saint Marys	Ohio										.52		T.	T.	.40	.10								.20	.40	.03				.26	.06		1.97
Smithfield	Fishing Creek	.05	.05		T.	.09					.51			.21	T.	T.								.42	.50	T.				.25	.07		2.15
Terra Alta	Monongahela																																
Wellsburg	Ohio				.92					.40					.40	T.								.60	.07				.25	.12			2.76
Weston	Monongahela										.45		.06		.20									.65	.20			.10	.20	.10			1.96
Wheeling	Ohio				.83	.23					.50				.40	.02	T.	T.						.14	.42	.04	T.			.43	.06		3.07
Southern Division.																																	
Bancroft	Great Kanawha										.72				.10	T.								.15	.27				.43		.05		1.72
Beckley	do												.08		.40									.58						.31			1.40
Bluefield	do												1.30											.25						.30			1.85
Charleston	do										.53		T.	T.	.17	T.			.10					.28	.43	T.			T.	.35	.10		1.96
Clay	do		.22				.16				.10				.04	T.	.20							.18	.30					.25	.10		1.50
Cuba	Sand Creek																																
Dam 22 O. R.	Ohio										.51				.25	T.								.19	.60					.49	.09		2.13
Dam 26 O. R.	do														.15	.04							T.	.14	.54					.22			1.07
Dunlow	Big Sandy				.19					1.03					.05								.14										1.41
Elkhorn	do									.24			.21											.36	.31				.18	.08			1.38
Evans	Ohio									.09	.55			T.	.22									.55					.21	.29			1.91
Green Sulphur Spgs.	Great Kanawha										.30		.33		T.									.45					.15	.25			1.48
Hinton	do	T.									.22			.12	.06	.02								.04	.34					.10	.16		1.06
Holcomb	do									.43			.21	*	.17	T.		.06					*	*	.78				*	.19			1.84
Huntington	Ohio										T.				.16	T.								.16	.42				.04	.26			1.04
Kayford		.05								.38				.24	.14	.04	.01		.04					.02	.65					.34	.15			2.06
Lanes Bottom	Great Kanawha									.39														.90	T.				.19	.13			1.61
Lewisburg	do										.52		.21											.56						.29			1.58
Logan	Guyandotte																																
Madison																																	
Marlinton	Great Kanawha				T.					.15			.11	.02	.13	T	T.	T	.06					.74	.06	T.			.22	.26			1.75
Nuttallburg	do										.30				T.	T.							.42							.36	.50		1.58
Point Pleasant	Ohio										.45				.42	.02								.22	.33				.04	.31	.03		1.82
Powellton																																	
Rainelle	Great Kanawha																																
Raleigh	do										.40			.11		T.								.11	.58					.18	.15		1.53
Renick	do										.30			.20										1.00						.50			2.00
Robertsburg	do										.47				.10									.14	.32				T.	.40			1.43
Ryan	do									.02	.47		.02		.19	T.		T.						.50	.22				.36	.09			1.87
Sissonville										.55					T.	T.								.45	T.				T	.40	T		1.40
Spencer	Little Kanawha										.62			.18		T.									.65					.40			1.85
Sutton	Great Kanawha																																
Union	do												.25	.35										.40	T				.30				1.30
White Sulphur Spgs	do	.50									.20		.30	.20	T.	T.								.45	T.	T.			T.	.30			1.95
Williamson	Big Sandy										.48		T.	.14	.06				.02					.06	.41				.05	.47			1.67

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

† Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch

††† Probably incomplete

Daily Temperatures for November, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	57	59	52	59	58	50	65	66	69	63	55	56	61	58	28	25	38	34	43	53	54	57	48	45	25	37	48	50	55	50	....	50.6
	Minimum	34	37	32	27	34	22	26	34	36	33	35	36	42	27	15	8	16	23	23	23	25	36	32	25	12	17	28	29	40	30	....	27.9
Brandywine	Maximum	60	69	63	64	65	58	68	71	72	66	64	62	70	61	40	37	53	50	57	64	59	57	58	57	37	47	55	53	57	53	....	58.2
	Minimum	34	27	27	24	42	29	30	29	38	40	26	38	40	39	18	15	17	25	17	27	28	23	39	35	22	18	22	23	36	42	....	29.0
Burlington	Maximum	60	68	58	56	52	53	54	65	74	59	60	50	70	58	40	35	52	43	48	62	42	43	56	53	36	44	57	45	54	51	....	53.3
	Minimum	41	31	29	27	35	28	30	30	28	31	30	29	34	38	25	20	14	23	25	32	25	19	28	34	25	17	17	20	32	39	....	27.9
Martinsburg§	Maximum	68	70	60	60	58	50	59	64	75	59	60	57	65	52	39	36	51	44	57	64	46	50	58	48	34	42	57	46	52	51	....	54.4
	Minimum	48	43	44	34	35	36	41	35	35	37	37	35	37	44	30	23	23	27	30	31	36	25	27	38	26	22	22	25	29	40	....	33.2
Moorfield	Maximum	66	73	65	58	64	62	61	77	79	72	67	59	70	69	42	40	57	50	63	67	61	53	57	55	40	51	64	53	63	61	....	60.6
	Minimum	51	32	31	26	32	28	28	29	32	41	28	31	37	41	27	18	14	26	11	31	29	20	29	37	25	20	22	23	39	44	....	29.4
Piedmont	Maximum	57	65	59	48	53	51	53	64	73	67	57	49	67	63	36	32	46	41	51	59	53	42	50	53	33	41	57	42	48	50	....	52.0
	Minimum	43	29	31	28	35	29	33	31	31	35	31	29	38	35	23	15	18	23	23	38	31	21	29	31	21	15	19	23	35	36	....	28.6
Romney	Maximum	62	70	65	57	65	58	59	68	80	74	62	58	73	70	44	35	51	49	57	64	63	46	53	56	45	42	59	60	55	56	....	58.5
	Minimum	48	40	40	27	40	28	30	32	28	39	38	28	36	40	27	18	15	25	22	23	23	21	28	37	34	18	19	23	35	45	....	30.2
Upper Tract	Maximum	69	67	67	66	66	65	....	75	....	74	72	69	71	66	64	60	53	49	55	64	61	60	55	52	50	48	56	59	60	56	....	61.8
	Minimum	45	31	30	25	26	32	....	38	....	40	34	34	41	38	25	18	16	31	20	34	36	25	33	30	22	22	29	30	30	40	....	30.5
Northern Division.																																	
Bens Run	Maximum	63	66	60	72	63	69	72	74	73	57	62	66	71	57	31	37	42	42	50	62	58	58	61	45	34	47	51	52	59	53	....	56.9
	Minimum	40	33	31	34	37	32	36	38	42	35	34	35	46	30	23	19	26	30	24	31	34	29	38	26	22	26	30	30	46	32	....	32.3
Buckhannon	Maximum	60	63	60	66	58	65	69	70	56	56	60	60	60	61	35	32	45	40	49	59	50	61	61	60	30	44	53	52	56	50	....	54.7
	Minimum	35	28	30	30	25	24	30	33	38	36	30	30	36	35	23	17	19	28	21	29	30	27	32	30	20	21	23	27	39	38	....	28.8
Creston	Maximum	64	69	64	73	69	74	74	74	76	70	66	61	71	67	38	37	47	44	55	63	57	64	63	54	37	48	58	50	57	54	....	59.9
	Minimum	32	27	26	29	34	28	34	34	37	32	28	33	43	32	24	19	18	26	18	25	27	24	35	36	23	21	21	25	43	34	....	28.9
Elkins	Maximum	55	64	54	66	59	68	71	75	73	56	64	58	68	54	28	33	45	34	51	60	55	64	61	43	29	45	57	44	58	50	....	54.7
	Minimum	33	28	28	26	31	25	30	32	33	33	29	46	46	28	17	15	19	25	21	33	30	26	36	24	18	22	26	23	39	32	....	28.5
Fairmont§	Maximum	64	68	64	67	61	72	75	76	74	58	58	65	70	37	28	37	44	43	55	63	51	60	61	38	33	46	60	54	57	49	....	56.3
	Minimum	37	33	29	30	36	29	31	35	36	34	31	33	45	37	25	16	18	28	26	33	33	26	27	36	21	18	27	28	33	38	....	30.3
Glenville	Maximum	67	69	66	73	75	76	80	78	75	61	71	80	73	72	34	40	46	44	57	66	58	65	63	56	39	52	62	55	57	56	....	62.2
	Minimum	43	25	24	27	33	30	31	31	38	35	29	32	44	33	24	18	18	26	12	25	25	23	22	32	23	24	20	24	44	40	....	28.5
Grafton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lost Creek	Maximum	63	66	61	64	70	72	74	70	74	67	60	65	70	66	33	36	45	41	54	63	53	62	62	53	34	46	59	53	57	51	....	58.1
	Minimum	48	30	24	25	28	25	31	30	39	35	28	30	45	32	24	13	16	23	25	36	30	22	33	31	20	20	30	24	39	39	....	29.2
Mannington	Maximum	64	68	60	65	59	69	73	74	73	56	58	62	71	62	32	35	43	42	54	62	50	58	62	54	32	44	59	52	57	52	....	56.7
	Minimum	33	27	25	27	31	25	31	31	33	30	28	29	52	32	25	14	18	26	19	25	28	24	31	32	20	16	23	24	43	32	....	27.8
Morgantown	Maximum	63	64	56	64	61	66	72	72	71	56	55	64	68	61	32	32	42	40	51	59	54	58	61	52	31	42	56	54	58	52	....	55.6
	Minimum	40	42	33	35	40	37	43	50	53	34	39	44	54	32	22	14	28	26	28	41	30	31	46	30	20	20	38	42	49	....	....	35.9
New Cumberland	Maximum	62	66	60	64	56	60	71	73	76	55	56	68	66	59	32	34	37	43	56	59	49	54	60	52	32	42	60	50	56	52	....	55.3
	Minimum	40	38	27	30	39	25	32	43	48	30	30	27	34	30	19	14	30	19	22	32	26	22	36	23	17	13	33	36	46	31	....	29.7
New Martinsville	Maximum	67	67	61	68	63	69	73	74	73	72	60	65	68	62	48	43	42	44	56	63	56	55	62	55	48	47	61	59	57	57	....	59.8
	Minimum	37	31	28	33	36	32	35	35	40	36	32	33	50	32	25	16	25	29	24	28	33	27	36	31	22	21	37	30	32	37	....	31.4
Parkersburg	Maximum	60	65	58	74	58	66	72	73	74	55	59	63	71	49	29	36	43	42	56	62	51	59	59	43	34	47	57	51	58	49	....	55.8
	Minimum	41	38	31	38	36	33	43	45	43	32	35	40	47	28	22	22	29	31	29	40	35	32	43	28	24	28	40	42	49	32	....	35.2
Parsons	Maximum	51	65	64	65	63	70	73	74	55	65	56	67	55	31	32	43	51	35	61	54	60	63	50	29	45	57	44	55	50	48	....	54.4
	Minimum	35	25	24	24	32	21	31	28	32	25	45	45	30	21	11	13	15	24	25	25	22	31	27	19	17	17	21	32	36	35	....	26.3
Philippi	Maximum	59	63	57	63	64	69	72	73	73	72	62	65	63	65	38	35	45	39	52	62	62	62	63	63	34	42	52	56	60	59	....	58.1
	Minimum	41	39	31	32	34	26	36	42	41	37	33	45	55	31	22	14	23	26	26	37	31	26	40	26	19	22	22	39	49	35	....	32.7
Pickens	Maximum	63	69	66	64	72	77	76	79	72	63	73	58	54	35	37	....	43	33	54	61	60	67	68	53	33	46	46	48	56	46	....	57.7
	Minimum	35	30	25	29	36	28	40	40	40	38	30	47	25	15	13	....	20	25	18	30	32	31	41	21	14	19	27	32	46	30	....	29.6
Terra Alta	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Wellsburg	Maximum	58	60	57	59	55	59	66	68	68	50	51	64	61	45	31	30	36	38	50	53	45	53	57	47	28	40	52	49	55	52	....	51.2
	Minimum	40	40	35	38	43	32	40	47	48	35	35	36	45	31	20	16	27	25	32	37	25	29	43	25	19	18	35	36	46	29	....	33.6
Weston	Maximum	66	67	62	69	68	69	74	75	74	59	62	62	69	66	34	36	44	46	52	63	55	62	63	54	46	58	53	57	56	57	....	59.3
	Minimum	39	32	31	41	34	28	35	37	42	38	32	35	50	32	25	17	32	27	27	35	33	27	36	33	22	28	28	45	40	39	....	33.3
Wheeling§	Maximum	64	70	64	66	64	65	75	77	74	42	61	67	68	37	34	39	40	54	58	68	53	49	60	39	35	45	61	53	59	48	....	56.3
	Minimum	41	34	39	28	37	30	32	35	38	32	35	31	31	35	26	17	18	28	27	35	33	26	26	36	21	19	25	32	45	34	....	30.6
Southern Division.																																	
Beckley	Maximum	70	69	70	72	75	77	80	80	69	69	70	70	76	68	38	51	53	54	55	68	67	66	67	35	41	46	65	69	69	68	....	64.2
	Minimum	29	28	39	39	28	28	34	32	34	28	29	30	38	21	16	16	20	21	28	27	28	29	29	19	18	30	29	31	30	24	....	27.7
Bluefield	Maximum	58	66	62	66	65	69	68	71	70	65	65	65	74	60	32	36	50	45	47	60	61	63	57	48	34	45	55	48	55	....	....	56.6
	Minimum	37	32	34	36	47	39	36	40	49	44	34	34	....	32	19	15	27	30	26	26	34	36	47	32	19	20	20	40	46	....	....	33.2
Charleston	Maximum	81	80	79	77	80	72	79	77	77	76	74	72	....	72	70	70	69	69	65	67	64	66	64	64	60	58	61	59	59	59	....	69.8
	Minimum	42	40	29	31	35	30	32	38	38	44	32	33	45	38	25	23	23	24	22	24	29	31	34	38	23	22	24	24	35	39	....	31.6
Elkhorn	Maximum	59	66	64	69	69	69	68	70	70	69	65	64	65	64	37	35	51	50	52	59	61	65	62	60	43	45	53	55	58	55	....	59.1
	Minimum	38	33	32	36	44	31	41	42	46	47	34	54	56	37	24	19	27	35	25	29	33	40	38	30	19	20	26	49	48	43	....	35.9
Green Sulphur Spgs.	Maximum	70	68	71	73	67	69	72	70	73	67	69	66	71	55	33	38	53	43	59	62	62	58	60	52	35	46	51	40	57	62	....	59.1
	Minimum	41	37	38	41	35	36	35	34	30	43	30	35	47	30	19	15	13	26	13	13	21	25	38	31	18	11	14	19	35	36	....	28.6
Hinton§	Maximum	61	67	62	70	70	61	56	65	73	60	64	55	70	46	29	38	55	42	53	61	60	60	61	43	36	44	51	43	57	50	....	55.4
	Minimum	36	29	32	29	32	31	32	35	35	37	32	32	45	44	24	19	19	20	21	23	25	29	32	39	21	16	19	19	30	41	....	29.3
Holcomb§	Maximum	59	66	61	70	68	72	73	75	76	58	69	72	70	40	26	38	51	52	50	61	63	66	60	40	38	48	46	59	58	49	....	57.8
	Minimum	31	26	23	26	35	26	27	32	33	36	27	32	39	39	20	18	18	23	17	18	26	28	27	26	19	14	20	21	35	40	....	26.7
Huntington§	Maximum	61	67	57	73	65	65	71	71	72	55	61	64	70	36	30	39	48	41	55	62	51	60	59	41	47	48	55	51	62	46	....	56.1
	Minimum	39	33	31	32	39	38	38	40	43	36	33	33	45	35	21	21	23	32	27	32	32	33	34	39	24	24	31	31	41	40	....	33.4
Lewisburg	Maximum	57	65	61	66	67	60	56	67	70	65	65	60	67	60	32	37	52	47	52	60	58	55	58	52	34	44	53	46	55	51	....	55.7
	Minimum	37	24	27	23	46	27	31	28	34	43	25	39	49	30	20	17	14	29	18	31	25	26	38	32	20	16	14	21	35	33	....	28.4
Madison§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Marlinton	Maximum	52	58	52	60	64	60	65	68	66	54	58	48	62	46	38	30	42	36	48	54	50	60	58	40	30	40	50	42	54	46	....	51.0
	Minimum	34	20	20	22	30	18	24	28	28	34	20	38	42	28	16	14	10	16	12	22	26	22	32	22	12	16	22	22	28	28	....	23.5
Point Pleasant	Maximum	66	70	64	75	70	67	75	76	75	59	64	67	73	61	32	40	48	45	59	66	56	60	57	51	37	51	60	52	63	55	....	59.8
	Minimum	32	29	25	31	31	29	35	35	44	30	28	33	42	28	20	18	23	30	24	33	27	25	37	30	20	23	27	32	44	33	....	29.9
Powellton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Robertsburg§	Maximum	63	69	64	75	68	69	76	76	74	59	69	65	72	36	31	40	47	44	58	65	50	65	64	44	37	51	65	57	63	46	....	58.7
	Minimum	33	29	28	30	35	30	35	37	41	37	29	34	44	35	23	19	20	31	23	28	30	27	29	39	23	19	24	25	37	43	....	30.6
Ryan	Maximum	61	62	61	73	72	76	75	74	68	55	65	60	70	58	32	37	46	43	56	65	58	65	62	51	35	40	58	48	56	50	....	57.7
	Minimum	28	26	24	27	29	25	32	30	36	30	25	34	38	31	23	16	16	25	16	21	23	22	35	32	22	17	17	24	45	32	....	26.6
Spencer§	Maximum	72	75	76	78	76	75	80	80	72	68	72	84	72	42	36	45	47	35	61	62	60	70	64	50	42	64	65	54	67	52	....	63.2
	Minimum	29	26	23	25	33	27	33	38	38	29	26	52	52	42	30	24	30	30	25	26	25	24	37	36	22	18	25	25	37	33	....	30.7
Union§	Maximum	70	68	70	71	70	70	71	70	69	70	72	70	69	38	37	41	38	39	60	61	59	60	53	35	35	45	55	55	52	....	....	57.7
	Minimum	24	25	26	25	27	25	26	26	25	23	25	27	26	25	21	17	16	17	19	22	25	25	33	32	20	14	15	24	32	39	....	24.2
White Sulphur Spgs.	Maximum	62	68	65	69	70	66	62	71	75	66	64	68	65	54	44	37	55	43	54	58	64	58	63	53	37	46	58	47	56	54	....	58.4
	Minimum	36	23	23	22	28	29	31	35	29	27	22	25	29	28	23	18	13	29	17	19	23	25	36	27	15	19	13	20	19	22	....	24.2
Williamson§	Maximum	65	71	64	75	73	74	75	76	76	61	70	72	71	40	34	41	56	38	57	64	62	65	63	46	38	52	60	51	61	54	....	60.2
	Minimum	40	32	33	35	38	42	41	41	43	47	37	37	45	38	25	19	20	26	24	27	29	32	35	40	26	23	25	25	38	45	....	33.6

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

DECEMBER, 1916

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JANUARY 20, 1917

Departure of the Mean Temperature from the Normal, December, 1916.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXIV. PARKERSBURG, W. VA., DECEMBER, 1916. NO. 12.

GENERAL SUMMARY.

December was exceptionally sunshiny and slightly colder than usual, with the precipitation averaging near the normal and well distributed. The snowfall was considerably above the average, the precipitation during the second decade being mostly snow. Thunderstorms occurred in many sections during the night of the 21st-22d. At Glenville, Gilmer county, the storm was attended by a brilliant electrical display and high winds, causing some damage. The conditions were generally favorable for grass and winter grains, as the ground was covered by snow during the cold period of the month.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.08 and 30.09 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.58 inches on the 31st, and 29.41 inches on the 22d. Elkins, 30.50 inches on the 31st, and 29.41 inches on the 22d.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 32.8°. The mean departure from the normal for 39 stations having ten or more years of record was —0.5°. The temperatures were generally above the normal from the 1st to the 9th and the 26th to the 28th, with the highest readings on the 5th, 8th, and 27th. Unseasonally cold weather prevailed from the 10th to the 24th and after the 28th, except the 11th, 21st, and 22d, with the lowest temperatures generally on the 16th and 19th. At Ryan, Roane county, the temperature was 18° below zero on the 19th, while at Spencer, in the same county, the reading was 14° below zero.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with departures from the normals, were as follows: Parkersburg, 8 a. m., 78 per cent; 8 p. m., 72 per cent. The December averages for the same hours for the past 28 years are 83 and 76 per cent, respectively. Elkins, 8 a. m., 85 per cent; 8 p. m., 67 per cent. The December averages for Elkins for the same hours for the past 16 years are 86 and 80 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 60 stations reporting, was 3.33 inches. The departure from the normal for 41 stations having ten or more years of record was —0.05 inch. The precipitation was heaviest over the west-central counties and thence eastward into the mountain sections, and lightest over the eastern panhandle and the extreme northern and southern counties. Light rains occurred on the 4-5th and 9th, and snow storms were general on the 12th, 14-15th, and 19th. The falls were generally light on the 12th, but from 4 to 6 inches fell in many sections on the 14-15th and from 6 to more than 12 inches on the 19th. The rainfall was heavy in many sections on the 27-28th, causing moderate rises in the rivers.

WIND.

The average wind velocity at Parkersburg was 6.2 miles per hour, or normal, as compared with the December average for the past 26 years. The average at Elkins was 4.6 miles per hour, or 0.1 mile below the December average for 17 years. The highest velocity at Parkersburg was 34 miles per hour from the northwest on the 22d, and at Elkins 33 miles per hour from the southeast on the 9th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 43 per cent of the possible amount, or 18 per cent above the December average for 19 years. The average at Elkins was 53 per cent, or 25 per cent above the December average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Charleston, 4th; Elkins, 8th; Hinton, 5th; Kayford, 21st; Lewisburg, 23d; Mannington, 21st; Robertsburg, 30th; Williamson, 1st and 31st.

Halos, lunar: Bayard, 2d; Elkins, 5th; Parkersburg, 2d; Pickens, 5th.

Hail: Fairmont, 22d.

Sleet: Bens Run, 9th; Elkins, 28th; Dunlow, 4th, 9th, and 21st; Holcomb, 9th and 21st; Marlinton, 21st; Moorefield, 21st; White Sulphur Springs, 9th.

Thunderstorms: Bayard, 27th; Bens Run and Brandywine, 22d; Elkins and Evans, 5th; Fairmont and Glenville, 22d; Green Sulphur Springs, 5th; Lost Creek, 21st; Mannington, 22d and 27th; Morgantown, 27th; New Cumberland, 4th; Martinsville, 21st; Ryan and Smithfield, 22d; Wheeling, 7th and 22d.

COMPARATIVE DATA FOR DECEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	40.9	75	6	3.27	....	...	....	..	..	..
1892	34.1	72	—10	2.91	....	...	....	..	..	..
1893	27.1	76	7	2.05	3.73	0.56	...	10	8	13
1894	36.8	80	—29	4.04	6.56	1.71	....	11	7	13
1895	36.9	72	— 6	2.87	4.14	1.85	7.1	8	9	14
1896	35.3	67	2	1.68	2.88	0.57	...	12	9	10
1897	37.3	72	— 4	4.00	6.79	2.05	....	6	9	16
1898	33.4	69	—12	2.66	4.23	0.71	7.0	12	8	11
1899	33.3	77	—17	2.81	4.46	1.22	5.9	11	8	12
1900	34.6	66	5	2.26	3.45	1.32	1.0	11	7	13
1901	32.3	75	— 9	5.84	8.97	3.57	3.8	7	8	16
1902	33.9	70	— 2	5.33	9.95	2.01	9.4	5	7	19
1903	26.5	59	—11	2.00	4.43	0.30	7.8	12	8	11
1904	32.8	71	—26	3.12	5.91	1.63	9.8	8	7	16
1905	35.6	70	3	3.11	5.24	1.30	3.4	11	6	14
1906	35.9	70	— 1	4.73	11.15	1.83	6.2	5	6	20
1907	35.5	70	— 2	3.36	9.31	0.70	5.2	9	8	14
1908	36.4	73	5	3.03	7.36	1.06	6.0	9	8	14
1909	28.8	78	—10	2.55	6.00	1.16	10.9	9	8	14
1910	28.4	72	— 8	2.72	6.90	1.00	14.6	7	7	17
1911	39.3	74	4	3.27	5.58	1.25	1.6	9	5	17
1912	35.8	76	— 6	2.88	5.55	1.45	7.1	12	7	12
1913	36.4	68	3	2.82	3.81	1.10	2.9	9	8	14
1914	30.3	70	—20	5.46	8.04	2.58	12.5	7	4	20
1915	32.8	68	0	4.35	7.19	1.35	7.6	5	7	19
1916	32.8	77	—18	3.33	6.38	0.85	10.6	15	7	11
Means and Extremes	34.3	80	—29	3.32	11.15	0.30	6.9	9	7	15

Climatological Data for December, 1916.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	28.2	−1.0	63	8	− 3	16	37	3.18	−0.85	0.51	17.0	12	11	9	11	w.	G. C. Dixon.
Brandywine	Pendleton		0	32.6	.....	68	5†	1	14†	41	1.41	.....	0.35	8.0	6	24	3	4	s.	Elmer Keister.
Burlington	Mineral	875	22	32.0	−0.6	67	5	4	20	40	1.31	−1.35	0.60	6.0	6	12	15	4	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27	.....	.....	.....	.....	.....	.....	...	2.46	−0.25	0.81	4.7	7	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	24	32.8	0.2	70	5	10	16	35	2.64	−0.06	.....	4.5	12	17	8	6	w.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	33.5	+0.2	71	5	− 3	20	41	1.56	− 0.73	0.60	8.0	8	26	2	3	.....	M. S. Henkel.
Piedmont	Mineral	919	0	30.4	.....	63	5	4	16	28	2.32	.....	0 71	8.1	9	14	13	4	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	19	33.8[a]	+1.5	70[a]	5	5[a]	20	37[a]	1.87	−0.63	0.48	8.0	7	12	16	3	w.	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	33.8[b]	−0.1	66[b]	5	5[b]	11†	35[b]	0.85	−1.43	0.60	10.5	2	18	11	2	w.	J. M. Mallow.
Averages and	Extremes	.....	.....	32.1	0	71	5	− 3	16†	41	1.96	−0.76	0.81	8.3	8	17	9	5	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	33.6	+0.4	66	8	2	19	34	3.29	−0.63	1.45	14.0	10	19	6	6	.....	J. D. Riggs.
Brandonville	Preston	1,809	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. T. Miller.
Buckhannon	Upshur	1,411	20	33.6	+0.7	68	8	3	16	37	4.50	+0.41	1.05	14.0	9	10	8	13	.....	H. A. Darnall.
Cairo	Ritchie	674	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Van A. Zevely.
Central Station	Doddridge	950	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. H. Doak.
Cheat Bridge	Randolph	3,600	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Walter Cole.
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	3.00	.....	0.65	11.0	7	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	15	33.7	−0.3	69	8	− 8	19	39	3.65	+0 38	1.08	10.0	13	11	6	14	w.	J. M. Reed.
Davis	Tucker	3,093	8	.....	.....	.....	.....	.....	.....	.....	4.39	.....	0.75	17.0	16	11	5	15	sw.	Ross C. Male.
Elizabeth	Wirt	646	5	.....	.....	.....	.....	.....	.....	.....	4.19	.....	1.15	.....	11	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,940	16	32.4	−0.1	70	8	1	16	41	3 20	−0.22	0.79	16.4	13	7	8	16	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	32.6	−0.1	73	8	4	16	48	3.36	−0.10	0.78	9.0	15	16	1	14	w.	F. P. Hall.
Glenville	Gilmer	738	23	35.8	+0.8	70	8	3	14	41	4.16	+0.42	1.14	11.5	12	5	15	11	w.	M. T. Brannon.
Grafton	Taylor	1,000	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	0	17	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	34.0	+0.6	70	8	2	16†	44	3.78	+0.25	1.04	8.8	11	13	2	16	w.	Allen Smith.
Mannington	Marion	974	14	32.7	+0.2	69	8	− 1	18	39	3.99	+0.60	1.42	9.8	14	9	11	11	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	33.6	−0.4	72	8	1	16	35	1.97	−1.25	0.40	10.2	11	14	6	11	sw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Z. White.
New Cumberland	Hancock	987	19	29.4	−0.6	67	8	4	16	35	2.26	−0.30	0.86	6.3	11	5	16	10	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	33.8	−1.1	68	8	0	19	31	3.81	+0.19	1.40	4.0	9	12	3	16	s	Wm. Ankrom.
Parkersburg	Wood	638	28	34.2	−0.9	69	8	3	16	36	3.48	+0.71	1.31	5.4	15	9	8	14	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	31 2	−0.1	70	8	2	16	45	3.06	−0.72	1.75	7.0	5	12	10	9	.....	J. W. Swisher.
Philippi	Barbour	1,149	20	35.2	+2.0	67	1	0	16	41	3.42	−0.52	0.90	19.0	9	11	16	4	w.	Okey J. Robinson.
Pickens	Randolph	2,697	14	31.9	−0.4	67	7†	3	14	43	6.28	+1.25	1.43	28.0	12	10	7	14	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30	.....	.....	.....	.....	.....	.....	.....	4.09	+0.25	0.86	.....	15	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	8	.....	.....	.....	.....	.....	.....	.....	4.32	.....	1.30	7.5	11	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	11	31.4	−0.4	68	8	2	18	43	4.09	+0.63	1.26	12.0	12	15	13	3	nw.	G. M. Whisler.
Terra Alta	Preston	2,612	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	30.7	0	66	8	0	16	32	1.23	-1.98	0.55	4.1	8	8	13	10	w.	C. P. Waugh.
Weston	Lewis	1,026	21	35.6	+0.5	72	8	4	16	37	3.18	−0.53	1.05	7.0	12	10[a]	6[a]	14[a]	.....	Weston State Hospital.
Wheeling	Ohio	645	30	31.0	.....	65	5†	1	16	37	2.66	−0.33	0.70	6.5	13	13	4	14	sw.	Miss M. B. Forsyth.
Averages and	Extremes	.....	.....	32.8	−0.1	73	8	− 8	19	48	3.54	−0.10	1.75	10.5	11	11	7	13	w.	
Southern Division.																				
Bancroft	Putnam	574	12	34.0	-1.5	75	8	− 4	16	45	4.80	+1.67	1.02	14.2	11	16	4	11	ne.	R. E. Dent.
Beckley	Raleigh	2,440	16	38.9	+5.3	74	8	− 1	14†	45	3.17	+0.16	1.52	11.0	7	10	2	18	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	37.4	+2.4	67	8	4	16	45	2.40	−0.55	1.00	14.0	5	18	8	4	.....	Norfolk & Western Ry
Charleston	Kanawha	597	13	41.8	-1.8	74	8	5	16†	53	4.10	+0.81	0.86	16.0	9	17	0	14	n.	C. V. Lewis.
Clay	Clay	706	0	.....	.....	.....	.....	.....	.....	.....	4.37	.....	1.80	26.0	9	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba	Jackson	650	14	32.7	−1.2	71	8	−12	19	47	3.80	+0.58	0.90	6.0	10	14	13	4	w.	C. T. Perry.
Dam 19 O. R.	.....	557	0	.....	.....	.....	.....	.....	.....	.....	3.23	.....	1.26	3.0	9	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	1	.....	.....	.....	.....	.....	.....	.....	3.06	.....	1.00	6.7	9	.....	.....	.....	w.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0	.....	.....	.....	.....	.....	.....	.....	2.89	.....	1.03	.....	8	.....	.....	.....	sw.	U. S. Engineer Office.
Dunlow	Wayne	703	8	.....	.....	.....	.....	.....	.....	.....	6.38	.....	2.00	11.5	11	10	0	21	n.	James W. Damron.
Elkhorn	McDowell	1,933	23	38.1	+0.8	67	8	6	14†	53	1.73	−1.37	0.68	8.2	7	9	13	9	w.	J. J. Lincoln.
Evans	Jackson	606	0	.....	.....	.....	.....	.....	.....	.....	3.23	.....	0.95	7.0	12	8	2	21	.....	B. F. Sayre.
Green Sulphur Spgs	Summers	1,600	20	30.7	−3.2	69	5	0	16†	51	3.95	+1.38	2.10	11.0	6	12	6	13	n.	W. H. Gwinn.
Hinton	do	1,450	19	30.9	−4.7	66	5	5	16	38	2.65	−0.21	0.78	10.7	12	15	1	15	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	31.8	.....	70	8	0	16	47	3.87	.....	1.15	22.0	10	13	4	14	.....	R. C. Ferguson.
Huntington	Cabell	538	20	33.1	−1.3	70	8	4	19	42	4.12	+0.68	1.04	13.5	12	12	0	19	.....	L. H. Hutchinson.
Kayford	Kanawha	1,335	0	.....	.....	.....	.....	.....	.....	.....	3.65	.....	1.05	16.5	11	.....	.....	.....	.....	Cabin Creek Con. Coal Co
Lanes Bottom	Webster	2,062	0	.....	.....	.....	.....	.....	.....	.....	5.74	.....	1.80	17.0	10	16	0	15	.....	C. A. Broddy.
Lewisburg	Greenbrier	2,200	16	31.7	−0.8	64	5	0	20	39	2.30	−0.48	1.20	9.0	5	12	10	9	nw.	Geo. T. Argabate.
Logan	Logan	687	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	27.7	−2.1	65	8	8	19	40	3.38	+0.22	0.90	14.5	10	10	12	9	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23	27.8	.....	57	5	2	15†	34	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	23	33.4	−1.8	72	8	− 4	19	40	3.91	+0.69	0.98	3.5	13	11	5	15	sw.	W. D. Holmes.
Powellton	Fayette	933	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. C. Lampert.
Rainelle	Kanawha	2,425	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Guthrie.
Raleigh	Beckley	2,130	0	.....	.....	.....	.....	.....	.....	.....	3.56	.....	2.95	7.0	5	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1 653	0	.....	.....	.....	.....	.....	.....	.....	3.30	.....	1.10	.....	4	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	16	32.6	−1.8	75	4†	1	16†	50	4.04	+0.43	1.10	10.0	11	16	2	19	.....	E. C. Brace, Jr.
Ryan	Roane	700	13	32.8	−1.3	71	8	−18	19	47	3.60	+0.16	0.86	9.3	15	6	14	11	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	0	.....	.....	.....	.....	.....	.....	.....	3.35	.....	1.00	8.0	4	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	12	33.3	−0.9	77	6	−14	19	53	4.64	-1.44	1.19	13.0	11	0	19	12	.....	A. M. McKown.
Sutton	Braxton	839	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ben Gillespie.
Union	Monroe	2,250	12	30.9[a]	−0.9	68[a]	7	2	14	53[a]	2.10	−0.33	1.40	7.0	3	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	32.0	.....	68	8	1	20	46	2.38	.....	0 93	11.0	8	21	1	9	w.	J. M. Ayres.
Williamson	Mingo	660	16	35.2	−2.0	73	8	5	16†	46	3.92	−0.01	1.38	12.0	10	11	5	15	w.	J. F. Keyser.
Averages and	Extremes	.....	.....	33.0	−1.2	77	6	−18	19	53	3.61	−0.32	2.95	11.4	9	12	6	13	w.	
State Averages and	Extremes	.....	.....	32.8	−0.5	77	6	−18	19	53	3.33	−0.05	2.95	10.6	10	13	7	11	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Approximated by the observer

Daily Precipitation for December, 1916.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac			T.	T.	.25				.30			.20	.30	.05	.40	T		.20	.20		.10	.30			T.		.37	.51				3.18
Brandywine	do					T.				.25			.25						.35			.18	.28					T.	.10				1.41
Burlington	do					*				.11			.20			.25			.20									.60					1.31
Harpers Ferry	do				T				T.	.12		T.	.63	T.		.10				.25		T.	.81					.10	.45	T.		2.46
Martinsburg	do			.05	.07					.25			.15	.05		.10			.25		*	.30	.47					*	.95				2.64
Moorefield	do					.04				.18			.20						.60			.18	.20					.05	.11				1.56
Piedmont	do					.03				.08				.02		.61		T.	.05			.45	.20					.71	.17				2.32
Romney	do				T.					.29			.20	.10		.10			.40										.48	.30				1.87
Upper Tract	do												.25							.60									T.				0.85
Northern Division.																																	
Bens Run	Ohio					.35				.23			.05			.18			.24			.25	.47		.04			1.45	.03				3.29
Brandonville	Monongahela					.17				.16						.40												1.87	.85				3.45
Buckhannon	do			T.		.80				.25			.40	.10		.40			.50		T.		.50		T.			.50	1.05				4.50
Cairo	Little Kanawha																																
Central Station	Middle Is. Creek																																
Cheat Bridge																																	
Cortland	Monongahela				.65					.20		.60								.30		.64	.20					.41					3.00
Preston	Little Kanawha				.03	.46				.13	T.		T.	.02	.01	.50	.03			.40		.33	.38	T.		.05		.23	1.08	T.			3.65
Davis	Monongahela					.62				.20			.15	.20	.10	.20	.20	.15		.20		.60	.35	.30				.17	.75	.15		.05	4.39
Elizabeth	Little Kanawha					.43				.23					1.01				.16	.15		.28	.38				.03	.35	1.15	.02			4.19
Elkins***	Monongahela			T.	.16	.32				.16		T.	.23	.04	T.	.21	T.		.39		.21	.11	.44		T.		.02	.28	.63		T.	T.	3.20
Fairmont	do				T.	.19				.10	.06		.20	.02	.01	.14	.04			.18		.27	.50	.04		T.		.78	.75	.08			3.36
Glenville	Little Kanawha					.92				.12			.10		.18	.55				.25		.32	.28			.08		.10	1.14	.12			4.16
Gratton	Monongahela																																
Lost Creek	do			T.	T.	.44				.15		T.	.11	.08	T.	.24			.07	.13	T.	.55	.40		T.			.60	1.04				3.78
Mannington	do			T.		.17			.03	.22			.24	.02		.19	.03		.13	.08		.28	.34		.04	T		1.42	.80				3.99
Morgantown	do			T.	T.	.06		T.		.12			.27	.02		.40	.12		.20	.40		.35		T				.01	.02				1.97
Moundsville	Ohio																																
New Cumberland	do			T.		.01			T.	.31		T.	.05	.10		.13			.05	.02	T.	.04	.82				T.	.64	.09	T.			2.26
New Martinsville	do									.30						.20			.18	.05		.28	.60		.20			1.40	.60				3.81
Parkersburg ***	Ohio			T.	.21	.12		T.	T.	.22		T.	.03	.01	.09	.19			.12		.21	.02	.36		.07		.33	1.23	.27				3.48
Parsons	Monongahela				T.					.36			.40								.25		.30					T.	1.75				3.06
Philippi	do					.42				.10			.30	.40	.50				.50	.20			.10						.90				2.42
Pickens	do			T.		.53				.40			.60	.40	.10	.30			.80	.20	.25		.64					.63	1.43				6.28
Powlesburg	do					.38				.16	.12		.12	.22	.10	.12	.12	T.		.30		.55	.34	.16				.54	.86	.20			4.09
Saint Marys	Ohio					.33				.43			.04	.03		.20				.25		.40	.60	.02				1.30	.72	T.			4.32
Smithfield	Fishing Creek					.21			T.	.12			.17	.10		.16	.10			.10		.31	.48					1.26	.61	.17			4.09
Terra Alta	Monongahela																																
Wellsburg	Ohio									.11			.10	.10		.10			.10			.01						.55	.16				1.23
Weston	Monongahela					.65				.25			.10	.10	.06	.30	.06	.05	.05		.06							.45	1.05				3.18
Wheeling	Ohio				T.	.19			T.	.24	T.		.02	.05	T.	.15	T.	T.	T.	.08	T.	.20	.67	.09		.04		.70	.25	.01			2.66
Southern Division.																																	
Bancroft	Great Kanawha					.87			.03	.10			.02	T.	T.	.70				.70		.75	.35					.13	1.02	.13			4.80
Beckley	do								.35	T.			.40		.05	.05				.60		.20											3.17
Bluefield	do												.60	.10		.10			.60									1.52					2.40
Charleston	do					.75	T.			.10	T.		T.	T.		.30	T.			.86		.43	.20	T.				.53	.83	.10			4.10
Clay	do					.06				.11				.20	T.	.30	.50	T.		1.80	T		.30							.30	.80			4.37
Cuba	Sand Creek					.35				.25			T	T.		.40			.20			.60	.35		.15		.50	.10	.90				3.80
Dam 19 O. R.	Ohio					.28				.10				T.		.11				.06		.26	.50	T.		.04		1.26	.62	T.			3.23
Dam 22 O. R.	do				.02	.44				.31			T.	T.		.15				.13		.25	.37					.35	1.00	T.			3.06
Dam 26 O. R.	do					.55				.13						.21				.12			.53					.52	.92	.11			2.89
Dunlow	Big Sandy				.14		.17	1.00			.90		.20		1.40					.04		.07		2.00				.17			.29		6.38
Elkhorn	do												.30		.10	.10		.28	.30			.02							.68				1.78
Evans	Ohio		.04			.54		.04		.29			T.	.03		.19	T.	T.	.12	T.	T.	.31	.35		.10			.27	.95				3.23
Green Sulphur Spgs.	Great Kanawha					.15				.30			.30							.80								.30	2.10				3.95
Hinton	do					.04				.14	.02		.20	.02	T.	.10	T.			.48		.24	.42	.02				T.	.78	.16			2.62
Holcomb	do					.26				.09			.26	.05		.25			.77		*	*	.85						1.15				3.87
Huntington	Ohio				.02	.96				.24			T.	.06	.02	.22	T.			.22		.38	.50					.36	1.04	.10			4.12
Kayford						.27				.23	T.		.17	.03		.30	.05			.44		.53			.26				1.05	.28			3.63
Lanes Bottom	Great Kanawha				.52					.20			.10	.10		.20			1.30		.46	.54						1.80	.52				5.74
Lewisburg	do									.20	.20					T.			.60		.10				T.			T.	1.20				2.50
Logan	Guyandotte																																
Madison																																	
Marlinton	Great Kanawha					.24				.23		T.	.25	T.		.05	.05	T	.90		.20	.21	.40						.85				3.38
Nuttallburg	do																																
Point Pleasant	Ohio				.02	.65				.22			T.	.02	.02	.26				.24		.23	.60			.05		.50	.98	.12			3.91
Powellton																																	
Rainelle	Great Kanawha																																
Raleigh	do					.09				.29			T.							.04								T.	2.95	.29			3.66
Renick	do																		.80		.50		1.10						.90				3.30
Robertsburg	do					.67			.04	.10					T	*	.60			.30		.2	.24	T.				.35	1.10	.12			4.04
Ryan	do			.01		.83		.02		.24			.03	.02		.31		.01	.30	.02	.11		.45		.04		T.	.35	.86				3.60
Sissonville					.70			T.							.75	T.					T.	.90			T.	T.	T.	1.00					3.35
Spencer	Little Kanawha					.78			.08	.07			.04	T.	T.	.65				.40		.90	.25	.10	T.	T.	.18		1.19				4.64
Sutton	Great Kanawha																																
Union	do											.30			T.				.40										1.40				2.10
White Sulphur Spgs	do					.05				.20			.20			.20			.60		.10						.10	.93				2.38
Williamson	Big Sandy					.58				.24			T.			.40	.30		T.	.70		.10	.40	T				.02	1.30	.08			3.92

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement

T Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for December, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	40	39	48	61	57	51	56	63	55	31	50	39	26	19	20	13	31	24	12	41	45	37	31	46	40	39	52	52	24	22	26	38.4
	Minimum	24	28	21	35	47	27	27	38	21	15	13	19	12	6	9	− 3	12	10	2	7	22	18	19	15	15	13	30	20	15	12	11	18.1
Brandywine	Maximum	51	52	53	65	68	61	61	68	60	45	48	38	33	25	31	30	39	34	26	38	50	40	41	46	45	53	50	51	40	36	39	45.7
	Minimum	20	22	18	26	35	33	20	29	35	14	22	16	13	1	20	5	19	13	1	5	24	25	16	17	29	14	35	34	18	13	10	19.4
Burlington	Maximum	57	50	40	53	67	56	57	62	48	41	43	36	36	30	32	25	37	32	27	30	40	41	44	39	45	38	38	47	38	38	37	42.1
	Minimum	34	27	20	27	38	38	28	22	28	20	15	27	18	15	15	8	12	14	11	4	26	26	18	20	25	14	32	34	25	19	15	21.8
Martinsburg§	Maximum	49	50	43	55	70	50	56	59	50	43	37	36	35	29	31	20	38	25	25	32	41	41	43	45	42	37	40	43	31	34	33	40.7
	Minimum	31	35	27	27	35	39	37	34	35	27	24	28	23	19	20	10	11	17	18	15	16	31	23	25	27	20	20	32	28	17	18	24.8
Moorfield	Maximum	52	57	46	58	71	63	62	68	60	48	48	45	40	31	38	24	39	34	35	29	42	40	50	45	41	41	41	42	43	39	40	45.5
	Minimum	26	29	21	24	47	35	26	27	34	17	17	26	20	5	18	9	12	17	0	− 3	27	30	16	17	32	16	31	36	26	16	14	21.5
Piedmont	Maximum	47	45	37	51	63	56	55	57	46	37	39	38	33	27	28	22	36	28	22	29	39	37	40	35	45	35	39	42	33	32	34	38.9
	Minimum	29	31	22	29	39	34	27	31	27	21	18	26	21	13	17	4	14	9	10	8	25	23	19	18	29	14	29	32	21	20	20	21.9
Romney	Maximum	53	53	50	57	70	68	60	65	65	43	45	44	37	30	30	26	39	38	23	26	..	44	43	47	45	40	40	43	41	36	36	44.6
	Minimum	35	38	20	23	40	38	30	28	32	25	16	29	19	14	17	7	14	14	13	5	..	25	20	23	28	15	28	35	26	18	13	22.9
Upper Tract	Maximum	55	50	50	62	66	62	60	65	..	55	45	43	38	35	31	30	35	34	33	44	40	..	36	40	45	45	57	55	35	35	50	45.9
	Minimum	28	29	21	29	47	35	25	35	..	21	18	26	22	5	20	5	17	15	8	9	20	..	26	16	34	16	34	23	14	12	15	21.6
Northern Division.																																	
Bens Run	Maximum	50	52	52	65	63	52	58	66	64	41	54	48	33	27	24	20	37	20	22	39	40	40	37	44	44	53	57	56	33	30	37	43.8
	Minimum	24	27	27	50	47	82	28	34	30	18	25	27	20	13	19	3	13	10	2	15	35	21	17	18	29	26	40	32	23	10	9	23.4
Buckhannon	Maximum	44	45	56	65	63	54	60	68	62	48	55	40	35	24	25	19	37	30	21	45	44	48	40	53	45	45	59	55	40	29	30	44.6
	Minimum	24	28	24	34	51	32	23	34	28	15	21	24	19	8	18	3	10	15	7	10	30	22	13	18	32	28	44	34	22	14	13	22.5
Creston	Maximum	50	54	56	66	66	54	54	69	63	42	56	51	31	26	25	23	40	30	25	40	43	41	40	51	48	55	59	55	38	39	40	46.1
	Minimum	20	20	22	34	51	28	22	30	30	13	19	28	23	7	18	− 2	12	9	− 8	10	34	28	15	18	26	20	40	34	18	22	18	21.3
Elkins	Maximum	47	47	49	65	63	45	63	70	61	40	56	37	31	27	24	39	36	25	22	43	48	45	40	49	42	50	60	54	32	29	34	44.3
	Minimum	27	23	22	31	39	31	22	32	24	15	19	22	14	4	8	1	23	15	8	13	34	19	12	16	21	19	44	30	21	14	14	20.5
Fairmont§	Maximum	50	53	53	63	65	52	61	73	35	42	55	31	33	27	25	37	35	21	24	42	47	36	40	48	42	52	57	57	40	35	31	43.5
	Minimum	24	24	24	29	51	34	24	25	32	17	18	29	21	13	14	4	5	7	11	11	19	36	19	20	25	26	27	35	22	16	14	21.8
Glenville	Maximum	53	55	60	68	68	62	58	70	65	46	60	56	34	30	30	28	41	34	31	44	45	49	45	55	49	61	61	57	33	35	41	49.4
	Minimum	20	20	22	31	50	35	22	30	30	14	19	28	22	3	20	4	10	13	9	8	33	27	14	18	30	20	42	34	23	12	9	22.3
Grafton	Maximum	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Lost Creek	Maximum	50	53	62	64	64	55	64	70	57	43	58	51	32	26	23	21	38	30	28	44	42	48	41	55	45	60	60	58	35	32	37	46.6
	Minimum	22	23	20	32	52	33	20	40	29	11	16	26	21	4	17	2	9	2	6	28	35	24	15	16	29	20	40	33	17	10	8	21.3
Mannington	Maximum	49	50	47	62	64	56	58	69	63	40	54	50	32	25	23	20	36	21	21	38	41	46	39	47	45	55	58	57	35	30	35	44.1
	Minimum	21	20	22	41	51	32	21	30	30	13	18	27	18	13	17	3	7	− 1	9	10	34	25	15	16	30	22	39	33	20	13	10	21.3
Morgantown	Maximum	47	47	50	62	63	54	58	72	64	37	55	51	30	23	22	18	34	25	20	43	42	45	37	50	44	48	56	55	33	27	32	43.4
	Minimum	21	28	29	49	52	33	28	49	29	20	24	24	18	12	17	1	12	6	8	16	36	18	18	19	28	27	39	32	20	12	14	23.8
New Cumberland	Maximum	55	54	45	66	54	53	53	67	62	39	47	39	26	24	24	14	27	20	17	41	37	36	22	39	40	44	54	52	30	28	35	40.1
	Minimum	26	23	23	42	43	30	22	35	27	18	17	23	16	16	12	− 4	9	− 3	− 3	13	31	19	7	5	24	16	34	26	16	11	9	18.8
New Martinsville	Maximum	51	51	45	65	63	57	53	68	62	40	54	54	32	26	25	21	35	23	23	40	39	39	38	42	45	48	57	55	41	31	36	47.8
	Minimum	25	24	26	43	50	35	26	47	31	18	24	28	21	14	20	3	12	5	0	15	33	23	18	19	30	26	40	32	23	15	12	23.8
Parkersburg	Maximum	51	50	54	66	63	52	55	69	64	40	53	38	32	26	23	33	37	19	26	41	40	37	38	46	42	53	59	48	32	29	35	43.6
	Minimum	28	28	30	54	43	34	32	41	28	19	27	27	17	12	12	3	16	12	5	24	36	22	19	21	29	27	44	29	23	16	14	24.9
Parsons	Maximum	47	40	50	65	64	50	63	70	62	38	56	41	30	25	21	18	37	28	21	43	45	43	43	51	45	53	59	49	32	32	33	43.4
	Minimum	21	20	19	20	49	29	20	38	26	13	15	23	17	11	15	2	11	9	5	6	32	20	8	12	24	15	36	31	18	12	14	19.1
Philippi	Maximum	67	47	64	64	64	61	60	60	60	56	47	52	34	25	23	25	24	23	20	45	43	52	52	54	54	55	59	55	45	29	34	46.9
	Minimum	26	29	32	47	51	33	31	28	28	26	15	25	17	1	12	0	4	7	15	17	36	23	23	31	18	20	42	32	20	13	13	23.4
Pickens	Maximum	49	51	53	66	64	50	67	67	55	45	49	37	29	26	37	31	32	25	27	38	43	43	40	50	41	55	54	53	27	25	38	43.8
	Minimum	22	25	27	42	40	28	24	38	20	12	25	18	10	− 3	11	− 2	13	12	3	12	33	16	12	18	28	22	45	27	17	16	8	20.0
Terra Alta	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Wellsburg	Maximum	46	49	45	60	56	47	51	66	60	34	47	37	28	30	37	14	25	20	17	45	45	40	32	42	38	49	56	44	31	30	29	40.0
	Minimum	26	29	30	30	45	31	32	43	28	20	23	25	18	9	12	0	6	5	4	17	33	17	15	17	24	21	36	20	16	14	16	21.4
Weston	Maximum	49	54	58	66	66	63	64	72	64	40	58	50	32	26	23	21	40	30	22	45	44	48	42	53	48	60	62	60	36	33	36	47.3
	Minimum	30	25	24	52	36	35	25	35	32	12	22	26	21	8	20	4	16	15	10	12	35	28	18	20	31	25	42	33	22	15	13	23.9
Wheeling§	Maximum	52	53	58	62	65	53	56	65	37	43	52	32	31	27	28	28	29	20	23	40	38	30	40	41	40	51	54	41	27	30	36	41.4
	Minimum	25	25	25	29	53	32	28	28	30	21	21	29	24	10	12	1	4	7	4	4	23	29	11	12	21	24	25	32	21	15	10	20.5
Southern Division.																																	
Beckley	Maximum	69	69	68	69	69	72	70	74	48	60	61	60	60	28	36	48	58	39	40	40	62	50	57	51	58	59	60	64	55	39	..	56.4
	Minimum	28	31	31	27	30	31	25	38	15	26	25	24	15	− 1	− 1	18	15	20	− 1	14	21	15	16	30	20	30	32	35	18	14	..	21.4
Bluefield	Maximum	50	51	62	60	64	56	65	67	58	39	55	48	30	27	31	28	38	39	40	38	53	53	37	53	..	54	59	59	59	59	60	49.7
	Minimum	26	33	29	40	51	33	25	39	26	16	32	22	17	5	18	4	27	18	18	6	34	21	20	19	..	31	41	37	26	20	15	25.0
Charleston	Maximum	57	59	58	66	72	69	66	74	72	70	68	65	61	60	59	58	58	57	56	57	58	56	54	56	57	56	63	61	59	58	56	61.2
	Minimum	24	23	26	29	40	29	27	26	32	18	26	30	28	10	11	5	6	19	5	17	26	21	16	25	28	28	31	38	23	18	14	22.5
Elkhorn	Maximum	48	50	60	61	65	63	62	67	63	43	54	52	32	29	33	28	39	44	40	38	52	52	40	50	52	59	61	59	39	39	38	48.5
	Minimum	28	31	32	39	52	32	29	38	30	17	40	26	20	6	20	6	28	22	28	19	37	26	20	29	27	26	48	39	28	20	16	27.7
Green Sulphur Spgs.	Maximum	50	52	54	58	69	60	60	67	60	52	54	42	34	28	28	27	42	35	27	36	48	41	39	46	44	48	48	49	39	33	39	45.5
	Minimum	17	17	19	25	40	23	16	16	30	16	14	14	12	6	10	0	18	11	0	0	26	14	6	24	14	12	34	32	11	10	6	15.9
Hinton§	Maximum	49	52	57	55	66	50	55	60	39	40	52	32	37	26	27	38	42	27	27	33	43	31	42	44	44	45	48	46	39	36	37	42.5
	Minimum	23	23	25	27	35	27	21	22	28	16	18	28	16	7	7	5	5	18	9	7	11	29	14	14	16	24	25	38	25	18	14	19.3
Holcomb§	Maximum	50	52	61	62	66	50	64	70	38	47	54	28	37	30	23	28	37	28	35	42	67	28	40	40	45	51	58	41	38	34	39	44.6
	Minimum	19	20	21	28	42	25	22	23	31	13	21	27	19	2	4	0	2	9	8	12	33	24	10	12	20	22	36	38	19	13	12	18.9
Huntington§	Maximum	52	49	62	68	64	51	52	70	37	37	54	33	33	27	24	42	37	23	31	41	40	30	40	48	40	52	61	39	35	32	35	43.2
	Minimum	27	28	28	35	54	33	28	28	30	20	20	30	26	12	12	5	5	22	4	7	30	26	11	12	28	29	30	33	24	19	16	23.0
Lewisburg	Maximum	47	49	51	55	64	62	58	63	61	40	47	50	31	25	25	26	37	35	24	26	42	42	38	41	43	43	45	46	47	36	37	43.1
	Minimum	24	31	22	31	38	34	19	25	29	20	15	19	11	3	19	2	10	16	3	0	25	24	10	21	30	22	34	36	23	19	13	20.3
Madison§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Marlinton	Maximum	44	50	46	55	54	44	58	65	60	50	48	32	27	24	30	22	34	28	22	26	46	34	30	38	40	38	40	38	28	32	30	39.1
	Minimum	22	24	16	24	40	28	18	30	34	14	18	22	16	− 2	12	− 4	10	12	− 8	− 4	26	18	2	8	20	10	30	28	12	18	12	16.3
Point Pleasant	Maximum	54	54	52	70	67	56	57	72	68	41	57	52	32	27	27	24	40	31	28	38	40	38	40	45	45	53	60	57	37	32	38	46.2
	Minimum	23	21	23	38	49	29	22	33	28	15	21	25	18	8	11	− 1	9	9	− 4	19	33	23	14	18	23	22	40	28	18	12	11	20.7
Powellton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Robertsburg§	Maximum	53	55	65	75	65	54	58	75	39	44	46	34	33	28	25	43	35	22	30	42	42	32	40	50	41	54	60	42	37	32	39	44.8
	Minimum	22	23	24	32	49	23	24	25	30	16	16	30	26	8	10	1	1	13	2	2	24	24	24	21	25	27	32	35	20	15	10	20.5
Ryan	Maximum	46	52	62	67	61	55	60	71	50	40	57	51	28	26	25	24	44	28	29	40	55	47	44	51	48	55	60	56	35	30	37	46.6
	Minimum	32	18	18	30	44	25	20	29	30	12	18	27	20	4	18	−12	15	9	−18	13	30	24	10	18	24	20	42	32	16	11	8	18.9
Spencer§	Maximum	55	56	66	71	71	77	61	74	40	42	62	35	34	30	27	40	41	25	32	42	50	35	40	54	45	60	61	41	45	32	42	47.9
	Minimum	19	20	26	26	28	28	20	21	30	12	20	30	25	0	20	− 6	20	− 9	−14	15	32	28	12	16	28	19	44	35	16	10	8	18.7
Union§	Maximum	50	54	49	65	62	61	68	61	62	65	50	29	20	28	20	28	40	21	28	44	46	42	47	48	49	52	49	40	38	39	..	45.2
	Minimum	28	27	25	22	28	19	22	28	22	12	14	21	12	2	4	3	4	10	4	5	10	25	12	16	20	20	23	30	19	15	14	16.6
White Sulphur Spgs.	Maximum	57	54	58	58	67	61	64	68	60	55	48	45	36	27	29	25	43	26	27	29	32	27	35	36	40	50	52	45	40	36	38	44.5
	Minimum	26	32	33	28	41	32	18	25	30	12	17	25	11	2	20	4	9	16	9	1	10	8	10	16	24	32	26	25	26	18	15	19.4
Williamson§	Maximum	54	55	66	69	69	55	63	73	40	42	43	33	36	29	28	45	43	29	31	40	48	35	45	50	47	61	61	43	40	37	41	46.8
	Minimum	27	27	28	34	40	30	27	27	32	22	22	25	25	12	12	5	5	24	5	5	26	28	20	20	30	30	32	42	27	23	20	23.6

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

ANNUAL, 1916

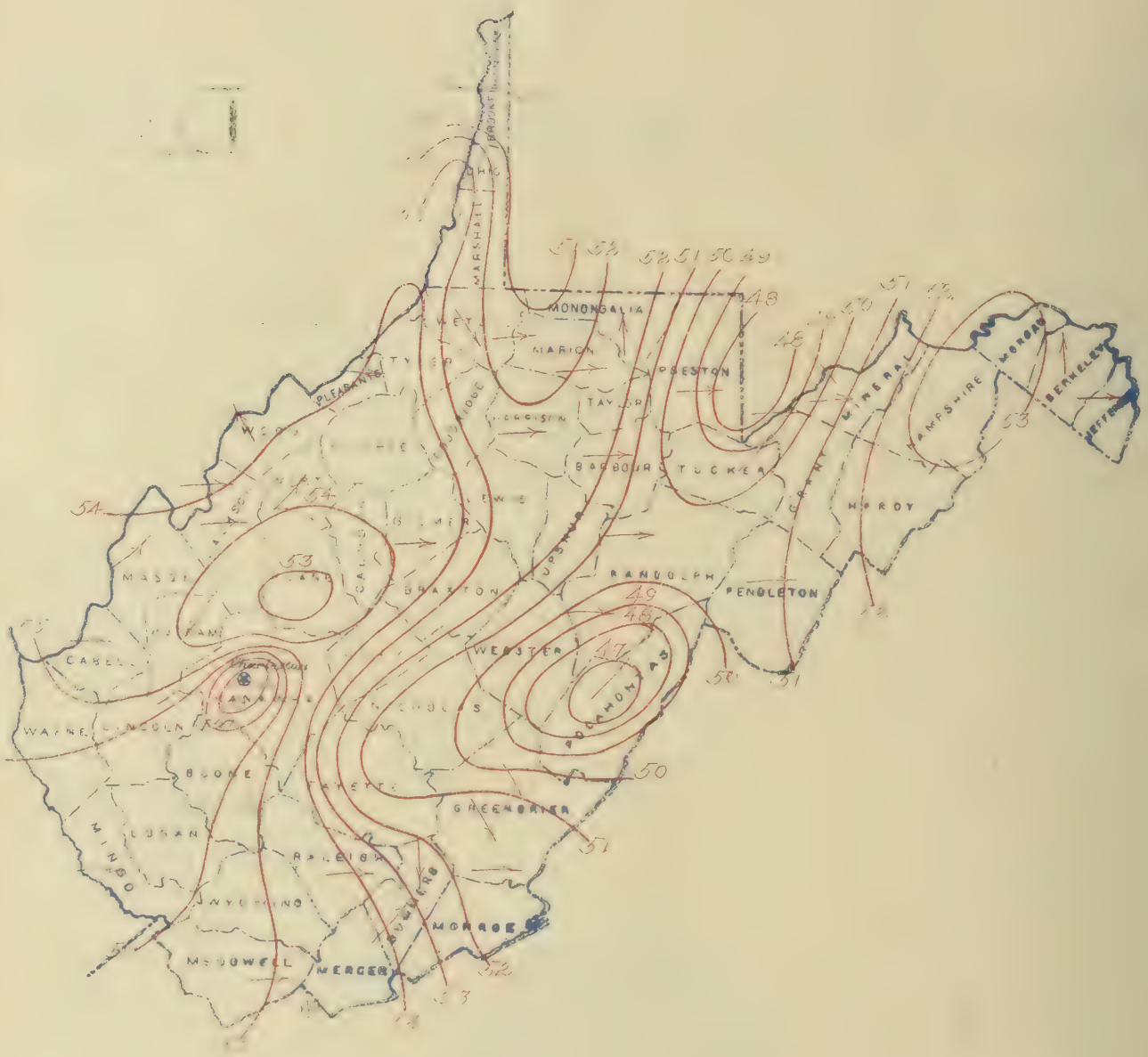
BY
HENRY C. HOWE
METEOROLOGIST

[illegible]
1917

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MARCH 2, 1917

MEAN ANNUAL ISOTHERMS AND PREVAILING WINDS, 1916

LINES PASS THROUGH POINTS OF EQUAL TEMPERATURE — ARROWS FLY WITH THE WIND



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXIV. PARKERSBURG, W. VA., YEAR, 1916. No. 13.

GENERAL SUMMARY.

The year 1916 was generally sunshiny, slightly colder, and somewhat wetter than usual, with the snowfall considerably above the normal.

January was unseasonably warm, while February, March, and April were cool. A warm May was followed by an exceptionally cool June, while July and August were continuously warm. The early fall was cool and the late fall and December seasonable.

A wet winter was followed by generally dry weather during April and May. The summer and early fall were wet, except July, while the last three months were generally dry. August was characterized by torrential rains in Boone, Fayette, and Kanawha counties, causing the loss of many lives and great damage to property.

The spring months were unfavorable for farming operations but generally favorable for fruit. A cool period in May, however, caused considerable damage to fruit and early vegetables. The last killing frosts in the spring occurred generally late in April and the first in the fall at the beginning of the second decade in October, making the season of growth about the average.

The average cloudiness was below the normal. The sunshine at Parkersburg averaged 47 per cent of the possible amount, or 3 per cent above the normal, while the average for Elkins was 50 per cent, or 7 per cent above the normal.

The wind movement for Parkersburg was 48,901 miles and for Elkins, 35,404 miles.

THE WEATHER BY MONTHS.

January.—This was the warmest January of record for the State, except in 1913, with an average temperature of 38.8°, or 6.2° above the normal. The highest temperatures, ranging generally from 70° to 75°, occurred generally on the 12th and 27th, while cold waves passed over the State on the 8-9th and 17-19th. The precipitation was also considerably above the normal, but the snowfall was deficient, and the ground was bare most of the month, owing to frequent rains and high temperatures. Excessive rains on the 11-12th caused floods in the West Fork and Little Kanawha rivers and considerable damage was done in Weston and nearby sections. The conditions were favorable for outdoor work.

February.—The month was somewhat colder and much wetter than usual, with nearly equal amounts of precipitation being received during the three decades. The snowfall was considerably in excess and the ground was well protected during the cold periods of the month. There were no destructive storms. The highest temperatures occurred generally on the 22d and the lowest on the 14-15th. From 1 to 10 inches of snow fell on the 2-3d, heavy rain or snow on the 12-13th, and heavy rain on the 25th. The West Fork and Little Kanawha rivers were at about bankful stages on the 25th.

March.—March was also much cooler and wetter than usual, with the snowfall in excess. While the precipitation was well distributed, heavy rain on the 21st-22d caused the Ohio to rise to bankful stages in most of the district. The temperature fell to zero at only one station, but abnormally cold weather prevailed from the 2d to the 6th, 8th to the 12th, and the 15th to the 21st. Unseasonally warm weather prevailed on the 25-26th. While the weather was generally unfavorable for farming operations, the conditions were generally favorable for fruit.

April.—This month was cooler and drier than usual, with a favorable precipitation distribution. The snowfall was considerably above the normal and was received, in most part, on the 8-9th. Owing to cool and cloudy weather, especially during the last decade, when heavy to killing frosts occurred in many of the more elevated sections, farm work and vegetation were about 10 days late at the close of the month. Frost caused considerable damage to early peaches, pears, and plums. Winter wheat and rye were in good condition at the close of the month.

May.—The temperature for May averaged considerably above the normal, the rainfall slightly below, and the sunshine normal, with a favorable rainfall distribution. It was the first normally warm month since January. While unseasonally cool weather prevailed near the close of the second decade, causing considerable damage to fruit and early vegetation, wheat, rye, corn, potatoes, berries, and pastures were generally in excellent condition at the close of the month. Farm work was delayed by frequent showers.

June.—This was the coolest June of record for the State, except in 1907, and also the wettest, except in 1901, 1907, 1909, and 1910. The temperature was generally below the normal until the 25th, but the last six days were seasonally warm and sunshiny. At the close of the month corn was more than two weeks late, but generally in good condition. Wheat, potatoes, pastures, and meadows were generally excellent. Owing to the cool weather during the first decade, apples and peaches were scarce in many sections.

July.—July was characterized by a deficient and unfavorably distributed rainfall and continuously high temperature after the first decade. The highest and lowest readings, however, were well within previous records. Heavy rains and floods in the New-Kanawha valley on the 16-17th caused much damage to crops on the bottom lands. Conditions were favorable for growth and harvesting and all crops made rapid progress, especially during the last decade. The wheat yield was about the average and the hay crop was large, while the outlook for corn, oats, potatoes, apples, and buckwheat was good. Heavy rain and wind storms, however, caused considerable damage to corn in many localities. The peach outlook was fair to poor.

August.—The temperatures were continuously high during August, except on the 13-15th, 23d-25th, and 28th-31st, and the rainfall was heavy and unfavorably distributed. Light frosts occurred in a few of the more elevated sections on the

14th. Cloudbursts caused great damage to property and crops in a few sections and the loss of more than thirty lives in the coal regions of Kanawha, Fayette, and Boone counties. The rainfall at Powellton, Fayette county, on the 9th was approximately 9 inches. Excessive rains on the 12th also caused much damage to crops in Pleasants and Tyler counties. At the close of the month corn was in good condition, the outlook for potatoes fair to good, and a good yield of late apples was in sight.

September.—This was the coolest September of record for the State and also the wettest, except in 1896, 1909, 1911, and 1912. While the average rainfall was large, the amounts received in many of the agricultural districts were insufficient. The distribution throughout the month was also unfavorable, most of the rainfall being received during moderate to heavy showers. Light to killing frosts occurred on the 19th and 20th, causing considerable damage to corn. Freezing temperatures occurred in many places on the 30th. At the close of the month an average crop of corn was nearly harvested, late apples were plentiful, and pastures were in good condition; but the potato crop was below the average.

October.—October was sunshiny and somewhat drier than usual, with the temperature averaging practically normal. The last decade was especially pleasant. Over the greater portion of the State growth continued until the beginning of the second decade, when heavy to killing frosts were general. Practically all the rainfall was received during the second decade. Fogs were frequent. The conditions were favorable for fall seeding and outdoor work.

November.—November was dry and sunshiny, with the average temperature slightly above the normal. Measurable amounts of snow were received in only the more elevated localities. The conditions were exceptionally favorable for outdoor work. At the close of the month wheat, pastures, and meadows were in good condition.

December.—December was exceptionally sunshiny and slightly cooler than usual, with the precipitation averaging near the normal and well distributed. The snowfall was considerably above the average. Thunderstorms occurred in many sections during the night of the 21st-22d, being especially severe at Glenville, Gilmer county At Ryan, Roane county, the temperature was 18° below zero on the 19th, while at Spencer, in the same county, the reading was 14° below zero. The conditions were generally favorable for grass and winter grains, as the ground was covered by snow during the cold period of the month.

CORRECTIONS.

The following changes should be made in the monthly reports of the West Virginia Section for 1916:

April.—Elkins, page 30, make highest temperature on the 22d 50 and mean maximum temperature 58.6 .

June.—Elkins, page 43, make percentage of sunshine 50 and departure from the normal —3.

December.—Elkins, page 91, make direction of maximum wind west.

Dates on which First and Last Killing Frost Occurred or Minimum Temperature Fell to 32 Degrees.

Station.	Last in Spring.	First in Autumn.	Station.	Last in Spring.	First in Autumn.
Bancroft	April 11	Oct. 11	Moorefield	.....	Sept. 19
Bayard	May 19	Sept. 17	Morgantown	April 10	Sept. 19
Beckley	May 19	Sept. 30	Moundsville	April 15	Oct. 1
Bens Run	April 11	Oct. 23	New Cumberland	April 19	Sept. 19
Bluefield	April 9	Oct. 11	New Martinsville	April 11	Oct. 11
Brandywine	.....	Sept. 19	Nuttallburg	.....	Sept. 20
Buckhannon	April 26	Sept. 19	Parkersburg	April 10	Oct. 11
Burlington	April 11	Sept. 19	Parsons	May 19	Sept. 19
Central Station	May 19	Sept. 19	Philippi	April 26	Sept. 30
Charleston	April 29	Oct. 12	Piedmont	April 11	.....
Creston	May 19	Oct. 1	Pickens	May 19	Sept. 19
Cuba	April 18	Sept. 30	Point Pleasant	April 11	Sept. 30
Dunlow	May 8	Oct. 4	Powellton	April 26	.....
Elkhorn	April 10	Oct. 11	Robertsburg	April 14	Oct. 27
Elkins	April 26	Sept. 30	Romney	April 11	Sept. 19
Fairmont	April 26	Sept. 30	Ryan	May 19	Sept. 19
Glenville	April 29	Oct. 11	Smithfield	April 29	Oct. 24
Grafton	April 19	.....	Spencer	May 18	Sept. 19
Green Sulphur Springs	May 18	Sept. 19	Terra Alta	May 19	.....
Hinton	April 12	Oct. 25	Union	April 29	Sept. 20
Holcomb	May 21	Sept. 19	Upper Tract	April 27	Sept. 19
Huntington	April 11	Oct. 27	Wellsburg	April 15	Sept. 19
Lewisburg	May 19	Sept. 20	Weston	.....	Sept. 30
Lost Creek	May 19	Sept. 19	Wheeling	April 11	Oct. 18
Mannington	May 19	Sept. 19	White Sulphur Spgs	May 20	Oct. 24
Marlinton	May 20	Sept. 19	Williamson	April 11	Nov. 2
Martinsburg	April 11	Oct. 2			

COMPARATIVE ANNUAL DATA FOR WEST VIRGINIA.

Year	Temperature			Precipitation
	Mean	Highest	Lowest	
1891	52.0	...	....	45.96
1892	52.1	99	−12	38.33
1893	52.0	99	−25	39.82
1894	53.5	103	−29	34.52
1895	51.5	107	−21	32.82
1896	53.6	97	−10	43.49
1897	53.5	103	−18	41.59
1898	54.8	103	−13	47.61
1899	53.2	100	−35	40.97
1900	54.1	104	−11	37.62
1901	52.1	104	−11	44.78
1902	52.8	104	−14	42.19
1903	52.0	105	−19	40.55
1904	50.9	98	−20	33.33
1905	52.3	100	−22	45.53
1906	54.0	101	−11	44.36
1907	51.7	98	−23	52.15
1908	53.7	101	−16	40.47
1909	53.0	101	−10	43.02
1910	52.3	98	−11	38.60
1911	54.6	106	− 5	47.13
1912	51.7	100	−34	43.78
1913	53.9	103	− 4	49.02
1914	52.3	106	−22	39.71
1915	52.8	101	− 8	43.76
1916	52.6	104	−18	44.63

TEMPERATURE AND PRECIPITATION FOR WEST VIRGINIA, 1916.

Month	Temperature in degrees Fahrenheit				Precipitation, in inches				Sky			Prevailing direction of the wind.
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest local amount	Number of rainy days	Clear	Pt. Cloudy	Cloudy	
January	38.8	+6.2	79	−10	4.86	+0.97	8.52	13	11	7	13	W.
February	31.4	−0.7	72	−12	4.30	+1.31	9.19	11	8	6	15	W.
March	38.5	−4.2	88	− 1	4.88	+1.01	9.88	13	11	7	13	W.
April	50.5	−1.1	90	17	3.07	+0.42	5.70	12	9	7	14	W.
May	64.0	+2.2	97	28	3.55	−0.28	6.00	11	15	9	7	W.
June	65.8	−3.3	94	35	5.42	+0.92	14.54	12	13	8	9	W.
July	74.8	+1.8	102	42	3.49	−0.93	9.47	9	16	8	7	W.
August	72.9	+1.4	104	40	4.76	+0.78	15.35	10	14	9	8	W.
September	63.0	−3.0	99	27	3.71	+0.85	7.88	7	18	6	6	W.
October	54.1	−0.4	97	16	2.38	−0.26	4.35	7	19	5	7	W.
November	43.8	+1.2	81	8	1.77	−0.77	3.07	6	16	5	9	W.
December	32.8	−0.5	77	−18	3.33	−0.05	6.38	10	13	7	11	W.
Annual	52.5	+0.0	104	−18	45.52	+3.13	15.35	121	163	84	119	W.

CLIMATOLOGICAL DATA FOR THE YEAR 1916

Stations.	Counties.	Elevation, feet.	Temperature (degrees Fahrenheit).						Precipitation (inches).							Number rainy days.	Sky.			Prevailing direction of wind.
			Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.	Total snowfall.		Number clear days.	Number partly cloudy days.	Number cloudy days.	
PANHANDLE DIVISION.																				
Bayard	Grant	2,700	7	47.4	87	July 30	− 8	Jan. 17†	7	52.74	6.14	Sept.	1.62	Nov.	74.9	165	99	99	168	w.
Brandywine	Pendleton		1		94	Aug. 22							0.78	Nov.						
Burlington	Mineral	875	23	51.1	96	Aug. 22	− 6	Jan. 8	23	33.74	5.23	Mar.	1.31	Dec.	36.0	80	111	210	45	w.
Harpers Ferry	Jefferson	244							28	40.64	8.58	June	1.18	Nov.	18.5	82				w.
Martinsburg	Berkeley	435	25	52.8	99	Aug. 22	3	Jan. 9	25	40.79	7.04	June	1.37	Nov.		100	225	80	61	s.
Moorefield	Hardy	900	21		103	Aug. 22			21	30.22	5.37	June	0.82	Nov.		93				
Piedmont	Mineral	919	1	50.5	98	Aug. 22	0	Feb. 14	1	31.48	5.42	Mar.	1.50	Nov.	36.1					nw.
Romney	Hampshire	824	20	53.6	98	Aug. 22	− 5	Jan. 8	20	36.06	6.02	Mar.	1.69	Nov.	37.0	100	109	192	65	
Upper Tract	Pendleton	1,230	19		93	Aug. 22	−10	Feb. 14	19	26.23	3.77	July	0.75	Nov.	33.5	66				w.
Averages and extremes				51.1	103	Aug. 22	−10	Feb. 14		36.49	8.58	June	0.75	Nov.	39.3	98	136	145	85	w.
NORTHERN DIVISION.																				
Bens Run	Pleasants	622	16	53.8	95	Aug. 19	− 1	Jan. 17	16	47.53	7.77	June	1.28	July	49.5	115	239	57	70	
Brandonville	Preston	1,809							7	45.95	6.66	June	1.92	July		96				
Buckhannon	Upshur	1,411	21	52.0	92	Aug. 4	− 3	Jan. 8†	21	59.23	7.96	Jan.	2.77	Nov.	49.5	126	205	56	105	
Cheat Bridge	Randolph	3,600							2		7.51	Sept.	1.11	Nov.						
Cortland	Tucker	3,300							2	46.45	6.29	June	1.47	Nov.		83				
Creston	Wirt	701	16	54.3	96	July 12†	− 8	Dec. 19	16	50.24	6.89	Jan.	1.84	Nov.	37.1	144	158	57	151	sw.
Davis	Tucker	3,093							9	62.34	8.32	Jan.	2.74	Nov.	84.5	162				sw.
Elizabeth	Wirt	646							6	46.49	6.50	Jan.	1.71	Nov.		121				
Elkins	Randolph	1,940	17	50.6	90	Aug. 5	− 6	Feb. 14	17	49.75	6.31	Jan.	1.50	Nov.	57.8	172	76	107	183	w.
Fairmont	Marion	885	12	52.6	97	July 12†	− 5	Feb. 14	12	42.11	5.23	June	1.87	Nov.	28.0	153	223	18	125	w.
Glenville	Gilmer	738	24	55.5	99	July 14†	− 4	Jan. 8†	24	51.09	6.96	Jan.	1.82	Nov.	46.0	123	151	100	115	w.
Lost Creek	Harrison	1,026	20	52.7	94	July 14†	− 8	Feb. 14	20	47.74	6.65	Jan.	1.87	Nov.	36.8	127	186	58	122	w.
Mannington	Marion	974	15	51.4	91	July 27	−12	Feb. 14	15	48.56	6.44	June	2.11	Nov.	36.7	167	138	94	134	w.
Morgantown	Monongalia	1,250	25	53.0	95	May 14	− 6	Feb. 14	25	38.15	6.51	June	1.06	July	29.7					s.
Moundsville	Marshall	642	15	54.5	97	July 28†	− 7	Feb. 15	15		3.89	Jan.	0.89	Sept.			185	73*	108	sw.
New Cumberland	Hancock	987	20	49.6	99	Aug. 21	− 9	Feb. 14	20	35.91	4.54	June	1.48	Sept.	42.6	120	115*	167	84	sw.
New Martinsville	Wetzel	634	24	54.0	97	July 14	− 6	Feb. 14	24	48.25	7.14	June	2.03	Sept.		115	189	59	118	s.
Parkersburg	Wood	638	29	53.9	95	July 27	− 1	Jan. 17	29	41.72	5.34	Jan.	1.84	Nov.	24.2	151	129	100	137	se.
Parsons	Tucker	1,656	18	49.6	88	July 11†	− 6	Feb. 14	18	44.63	6.05	Aug.	0.99	Oct.	47.0		160	94	112	
Philippi	Barbour	1,149	21	53.7	97	Aug. 21	− 6	Feb. 14	21	42.87	6.36	Jan.	1.32	Nov.		121	128*	170	68	w.
Pickens	Randolph	2,697	15	50.3	87	Mar. 25†	−10	Feb. 14	15	69.56	9.88	Mar.	1.95	Nov.	147.0	150				w.
Rowlesburg	Preston	1,375							31	55.35	7.13	Jan.	2.59	Nov.		132				
Saint Marys	Pleasants	577							9	53.39	10.79	Aug.	1.97	Nov.	25.3	126				w
Smithfield	Wetzel	835	12	52.0	93	July 27	− 8	Feb. 14	12	53.70	7.56	June	2.15	Nov.	35.5	144	195	90	81	nw.
Terra Alta	Preston	2,612	17		91	July 31			17											
Wellsburg	Brooke	1,225	17	50.2	93	Aug. 21	− 5	Feb. 11	17	33.43	4.19	June	1.23	Dec.	36.1	113				w.
Weston	Lewis	1,026	22						22											
Wheeling	Ohio	645	31	53.0	104	Aug. 21	− 7	Feb. 14†	31	38.61	4.79	Aug.	1.73	July	31.5	151	182	66	118	s.
Averages and extremes				52.4	104	Aug. 21	−12	Feb. 14		48.04	10.79	Aug.	0.99	Oct.	46.9	132	166	85	115	w.
SOUTHERN DIVISION.																				
Bancroft	Putnam	574	13	53.7	102	July 30†	− 4	Dec. 16	13	44.84	6.15	Aug.	1.72	Nov.	38.5		199*	10	157	nw.
Beckley	Raleigh	2,440	17	51.4	89	July 13†	− 6	Jan. 17	17	54.82	7.80	Sept.	1.40	Nov.	50.5	90	185*	63	118	w.
Bluefield	Mercer	2,558	22	54.4	86	May 26†	0	Jan. 18	22	27.95	3.35	Feb.	0.90	May	46.5	66				
Charleston	Kanawha	597	14	58.6	97	July 27	1	Jan. 18	14	50.96	5.33	June	1.96	Nov.	37.7	126	152	23	191	w.
Clay	Clay	706	1						1	37.06	3.29	June	0.93	Oct.	55.0	89				
Cuba	Jackson	650	15	54.2	95	July 30	12	Dec. 19	15	44.13	7.15	Jan.	2.00	July	26.0	106	120	194	52	w.
Dam 22 O. R.	Jackson	538							2	41.33	6.45	Jan.	1.71	July		116				w.
Elkhorn	McDowell	1,933	24	55.5	89	May 26†	2	Jan. 18	24	43.34	9.47	July	1.38	Nov.	49.2	117	121	151	94	w.
Evans	Jackson	606							2	48.58	6.83	June	1.91	Nov.	26.5	133	172	26	168	
Green Sulphur Springs	Summers	1,600	21	52.2	93	July 26	− 6	Jan. 17	21	46.28	5.28	July	1.25	Oct.	65.0	102	173	62	131	n.
Hinton	Summers	1,450	20	52.9	93	Aug. 11	0	Jan. 18	20	43.08	6.81	Aug.	1.06	Nov.	31.2	134	147	36	183*	sw.
Holcomb	Nicholas	2,042	5	50.5	93	July 8	− 9	Jan. 18	5	49.85	6.31	Sept.	1.84	Nov.	108.0	133	146	57	163	
Huntington	Cabell	538	21	54.4	95	July 30	3	Jan. 17†	21	46.68	5.48	Aug.	1.04	Nov.	36.7	127	177	32	157	w.
Lewisburg	Greenbrier	2,200	17	51.4	90	Aug. 7†	− 4	Jan. 9	17	38.04	5.55	June	1.58	Nov.	42.5	98	154	110	102	nw.
Marlinton	Pocahontas	2,131	18	46.9	88	Aug. 5	−10	Jan. 8†	18	47.88	7.14	July	1.75	Nov.	48.5	140	70	220	76	sw.
Point Pleasant	Mason	553	24	54.5	99	July 27	4	Jan. 17†	24	45.32	7.18	Jan.	1.82	Nov.	23.0	138	146	64	156	sw.
Renick	Greenbrier	1,655							1	41.82	7.40	June	1.20	Oct.		76				nw.
Robertsburg	Putnam	574	17		96	July 24	3	Feb. 14	17	41.78	5.80	Jan.	1.43	Nov.	30.5	126				
Ryan	Roane	700	14	52.3	95	July 13†	−18	Dec. 19	14	49.57	6.04	Mar.	1.87	Nov.	42.8	155	138	108	129	
Spencer	Roane	784	13	53.4	91	July 12†	−14	Dec. 19	13	47.51	6.74	Mar.	1.85	Nov.	43.0	108	73	195	98	
Union	Monroe	2,250	13	51.5	90	July 25†	2	Jan. 17†	13	39.44	7.49	Aug.	1.30	Nov.	30.0					
White Sulphur Springs	Greenbrier	1,949	7	51.4	87	May 26	− 3	Jan. 9	7	36.95	5.83	July	1.95	Nov.	34.5	111	237	42	87	w.
Williamson	Mingo	660	17	56.4	93	May 14†	5	Dec. 16†	17	42.61	4.73	June	1.67	Nov.	29.5	158	195	67	104	w.
Averages and extremes				53.3	102	July 30†	−18	Dec. 19		43.91	9.47	July	0.90	May	42.4	116	153	86	127	w.
State averages and extremes				52.6	104	Aug. 21	18	Dec. 19		44.63	10.79	Aug.	0.75	Nov.	43.9	121	157	92	117	w.

* 1 day interpolated from nearby stations.

† And other dates.

Monthly and Annual Mean Temperatures for the Year 1916, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September		October.		November		December.		Annual.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
PANHANDLE DIVISION																										
Bayard	36.0	+7.4	26.8	−0.5	32.5	−5.3	45.1	−1.9	60.0	+2.9	60.0	−3.7	69.1	−1.3	66.5	+0.7	57.2	−3.3	48.6	−0.7	39.2	+0.7	28.2	−1.0	47.4	−0.3
Brandywine													73.0		71.0		62.0		53.6		43.6		32.6			
Burlington	35.4	+4.4	31.4	−1.4	35.9	−5.3	50.0	−0.8	63.6	+2.1	65.0	−3.6	73.4	+0.6	73.6	+2.5	61.5[a]	−3.4	50.9	−2.7	40.6	−1.7	32.0	−0.6	51.1	−0.6
Lost City	37.2	+2.9																								
Martinsburg	35.7	+5.0	30.2	+0.4	35.8	−5.2	51.5	0	65.9	+2.9	68.2	−2.6	77.0	+1.5	75.0	+2.0	64.3	−2.3	53.1	−1.5	43.8	+0.9	32.8	−0.2	52.8	+0.1
Moorefield											68.3	−1.0	77.4	+3.8	76.1[c]	+3.4	66.4	−0.4	55.8	+1.2	45.0	+1.5	33.5	+0.2		
Piedmont	36.0[a]		31.4		36.0		49.0		63.1		63.4		71.1		72.4		62.0[b]		51.0		40.3		30.4		50.5	
Romney	38.9	+8.1	33.2	+1.8	37.0	−5.6	53.7	+2.3	66.6	+4.2	66.9	−3.1	75.9	+0.8	74.7	+2.0	64.8	−1.8	53.8[a]	−1.0	44.4	+1.8	33.8[a]	+1.5	53.6	+0.9
Upper Tract	40.8[a]	+8.5	33.4[b]	+1.3	37.5	−5.7	50.3	−1.1	63.2	+1.4	63.4[a]	−4.6	72.9[b]	+0.5	71.8[a]	+0.8			54.2[a]	−1.0	46.2[b]	+1.5	33.8[b]	−0.1		
NORTHERN DIVISION																										
Bens Run	40.0	+7.7	31.3	−0.1	39.2	−3.9	51.6	−0.7	64.9	+1.4	67.3	−5.1	77.6	+2.5	74.8	+1.2	65.5	−2.8	55.6	−0.7	44.6	+1.4	33.6	+0.4	53.8	+0.3
Buckhannon	39.4	+7.3	31.4	+0.3	39.2	−2.2	50.3	−0.7	63.8	+1.7	65.2	−3.6	73.8	+3.6	71.4	+1.4	61.5	−3.1	52.6	−0.5	41.8	+0.3	33.6	+0.7	52.0	+0.4
Cairo	40.8[a]	+6.3	29.1[a]	−3.7																						
Central Station	36.7[e]	+4.9			38.6[e]	−3.2	50.7[e]	−0.6	63.7[e]	+1.9	63.7[d]	−6.0														
Creston	40.8	+6.9	33.2	+0.6	41.5	−2.3	52.4	−0.5	65.6	+2.1	67.4	−3.3	76.8	+2.1	75.1	+2.0	64.8	−2.9	55.6	+0.3	44.4	+0.7	33.6	−0.4	54.3	+0.4
Elkins	37.8	+8.8	29.4	−2.1	36.8	−2.3	48.0	−0.7	62.4	+3.3	63.7	−2.9	72.6	+2.1	70.3	+1.9	60.3	−1.6	51.6	+0.2	41.6	+2.0	32.4	−0.1	50.6	+0.7
Fairmont	36.1	+1.9	27.7	−5.2	36.9	−4.9	49.6	−2.9	65.3	+2.8	67.2	−3.1	77.4	+3.2	74.9	+2.3	64.8	−2.7	54.9	−0.2	43.3	+0.5	32.6	−0.1	52.6	−0.7
Glenville	41.2	+8.1	34.2	+2.1	42.8	−1.1	52.0	−1.2	64.4	+1.0	68.4	−2.2	79.0	+4.4	78.0	+4.7	67.2	−0.5	58.1	+2.8	45.4	+1.9	35.8	+0.8	55.5	+1.7
Grafton	43.0	+10.6	33.1	+1.8	40.0	−2.7	52.4	+0.8	66.0	+3.8																
Lost Creek	39.2	+6.2	30.8	+0.3	39.5	−3.2	50.5	+0.5	64.6	+3.5	65.4	−2.4	75.0	+2.6	73.0	+2.5	63.0	−2.3	53.6	−0.9	43.6	+1.4	34.0	+0.6	52.7	+0.7
Mannington	39.0	+7.4	30.2	−0.3	38.0	−5.2	49.7	−1.8	63.2	+1.9	64.0	−4.4	73.2	+0.7	71.4	+0.5	61.0	−4.7	52.6	−1.3	42.2	+1.1	32.7	+0.2	51.4	−0.5
Morgantown	38.8[d]	+6.5	29.8	−1.5	37.0[a]	−5.2	50.6[a]	−0.8	64.7	+2.1	66.0	−3.0	75.6	+2.1	74.3[a]	+2.2	64.8	−2.8	55.4	+0.2	45.8[a]	+2.4	33.6	−0.4	53.0	+0.2
Moundsville	41.8	+9.3	31.2[a]	−0.4	38.6	−4.8	51.6	0	65.4	+2.2	66.8	−3.1	77.4	+3.1	75.8	+3.3	65.2	−2.8	56.7	+0.9	48.8	+5.6	35.2	+1.5	54.5	+0.9
New Cumberland	34.3	+5.7	25.6	−1.8	32.8	−7.3	48.1	−1.4	61.2	−0.3	62.4	−5.8	73.3	+0.3	71.9	+1.2	62.6	−3.1	51.6[a]	−2.7	42.5	+1.2	29.4	−0.6	49.6	−1.2
New Martinsville	39.2	+6.2	30.4	−1.6	38.0	−5.6	52.4	−0.8	65.2	+1.5	67.2	−4.4	77.8	+2.3	75.8	+1.8	65.6	−3.2	57.4	+0.6	45.6	+1.0	33.8	−1.1	54.0	−0.3
Parkersburg	38.8	+7.4	30.0	−4.1	39.4	−2.9	52.5	−0.5	65.9	+2.6	67.6	−4.0	77.7	+2.2	75.2	+1.9	64.2	−1.9	55.3	+0.8	45.5	+2.3	34.2	−0.9	53.9	+0.3
Parsons	36.0	+4.2	30.6	+1.3	35.6	−6.8	47.3	−5.1	61.9	+2.7	62.8	−3.6	71.2	+0.9	69.2	+0.1	58.4	−5.2	50.9	−2.0	40.4	−0.8	31.2	−0.1	49.6	+1.2
Philippi	41.4	+8.7	31.2	−0.2	38.2	−4.5	52.4	+1.2	65.8	+3.9	66.8	−1.7	75.3	+2.5	73.4	+1.8	64.0	−1.7	54.8	+0.5	45.4	+2.2	35.2	+2.0	53.7	+1.2
Pickens	39.7[a]	+8.6	29.8[a]	−2.0	36.6	−3.0	47.2	−1.3	62.4	+3.5	61.6[a]	+3.7	69.7	+0.9	67.2	+0.3	58.8	−3.1	54.9[a]	+2.9	43.6[a]	+3.0	31.9	−0.4	50.3	+1.1
Smithfield	37.0	+5.0	28.0	−3.2	37.2	−4.9	49.2	−2.8	64.0	+2.7	65.4	−2.8	74.4	+1.1	72.3	+1.2	62.8[a]	−2.8	55.6[a]	+2.3	46.2	+5.2	31.4	−0.4	52.0	0.0
Terra Alta	31.2	+2.9	25.4	−2.4	32.0	−7.4	45.6	−2.1	60.8	+1.3	60.2	−6.3	72.4	+2.9	68.0	0										
Wellsburg	36.2	+6.8	25.8	−1.4	33.4[d]	−5.8	47.8	−1.1	61.7	+0.9	63.4	−4.1	74.1	+2.3	72.0	+2.1	62.0	−2.9	53.0	−0.6	42.4	+1.2	30.7	0.0	50.2	−0.2
Weston			30.2	−1.2	39.8	−3.9											60.6[b]		55.3	+0.4	46.3	+3.0	35.6	+0.5		
Wheeling	37.2		28.2		36.4		50.7		65.6		67.6		78.8		77.0		65.6		54.4		43.4		31.0		53.0	
SOUTHERN DIVISION																										
Bancroft	38.9	+3.7	31.8	−1.8	40.4	−4.1	52.0	−1.8	65.0[a]	−3.2	67.2	−4.3	77.9	+2.5	73.9[c]	+0.1	64.0	−5.8	54.5	−3.1	44.9	−0.1	34.0	−1.5	53.7	−1.6
Beckley	42.6	+9.4	39.0	+6.5	45.3	+2.7	51.5	+2.2	62.8	+3.0	65.8	−1.5	73.4	+2.0	71.2	+1.7	61.9	−1.8	54.6	+0.2	46.0	+3.4	38.9[a]	+5.3	54.4	+2.8
Bluefield	43.2[a]	+8.9	35.2	−1.7	42.0	−1.7	50.9[d]	−2.9	64.6[b]	+2.2	69.6[c]	+0.7	73.2[d]	+1.4	71.4	+0.1	63.4	−2.9	57.4	+1.9	44.9[b]	+0.4	37.4[a]	+2.4	54.4	+0.7
Charleston	44.5	+5.5	38.7	+0.4	45.8	−3.1	57.2	+0.1	70.0	+4.0	70.4	−2.4	78.4	+1.5	77.4	+2.1	68.9	−1.6	59.6	+1.1	50.7	+2.6	41.8	+1.8	58.6	+1.0
Clay																										
Cuba	40.6	+6.9	32.0	−0.2	40.8	−3.4	54.4	+1.8	68.4	+5.6	67.6[c]	−1.5	77.0	+3.7	74.1	+2.3	63.2	−3.9	55.4	+0.2	44.0	+0.4	32.7	−1.2	54.2	+0.9
Dunlow	42.0								60.2																	
Elkhorn	46.0	+9.0	37.2	+1.5	43.4	−2.5	52.8	−0.4	66.8	+4.1	66.9	−1.7	74.0	+1.9	72.4	+1.3	64.0	−2.5	56.6	+0.8	47.5	+1.7	38.1	+0.8	55.5	+1.2
Green Sulphur Springs	38.8	+5.8	32.8	+0.6	38.7	−4.4	50.0	−1.0	63.6	+1.9	65.4	−3.2	72.6	+0.2	72.6	+1.1	63.7	−2.6	53.2	−1.4	43.8	+1.2	30.7	−3.2	52.2	−0.4
Hinton	37.6	+3.4	32.9	−1.4	39.4	−5.0	50.8	−2.6	65.6	+1.3	68.1	−2.8	75.0	+0.5	73.8	−0.2	64.3	−4.0	54.4	−2.2	42.4	−2.0	30.9	−4.7	52.9	−1.6
Holcomb	37.1		29.2		35.4		47.6		61.8		63.2		73.4		70.2		61.6		52.6		42.2		31.8		50.5	
Huntington	38.0	+5.0	32.2	0	40.7	−4.0	54.2	+0.2	67.2	+2.4	69.0	−3.7	78.4	+1.8	75.6	+1.0	65.0	−3.7	54.3	−1.9	44.8	+1.1	33.1	−1.3	54.4	−0.3
Lewisburg	38.4	+6.1	33.2	+1.5	38.2	−4.3	49.0	−1.2	62.7	+1.9	65.0	−2.5	72.0	+0.5	71.0	+1.1	61.4	−3.3	52.6	−0.8	42.0	+0.6	31.7	−1.8	51.4	−0.1
Madison															75.6[c]											
Marlinton	32.4	+3.4	28.8	−0.5	33.4	−5.7	44.3	−3.3	58.1	−0.7	60.5	−5.1	68.2	−1.0	67.2	−0.5	57.2	−5.3	48.0	−2.6	37.2	−1.1	27.7	−2.1	46.9	−2.0
Nuttallburg									59.1[d]						65.9[d]		57.0[d]				39.4[b]		27.8[d]			
Point Pleasant	40.0	+6.0	32.6	−0.6	41.4	−3.9	53.7	−1.3	66.0	+0.5	68.2	−4.7	77.6	+1.0	75.8	+1.1	65.2	−4.5	55.2	−2.3	44.8	−0.4	33.4	−1.8	54.5	−0.9
Powellton	43.4	+6.8	35.7	+0.5	43.8	−1.9	51.6[b]	−2.9			67.9	−2.9	77.2	+3.0	74.9[c]	+2.1										
Robertsburg	36.8	+2.5	29.6	−3.3	39.0	−6.1	51.8	−1.4	66.6	+2.5	70.6	−0.8			76.0[d]	+1.7	65.4	−3.3	57.4[f]	+0.2	44.6	+1.2	32.6	−1.8		
Ryan	38.6	+4.6	31.6	−1.6	39.3	−5.0	49.8	−3.0	64.1	+1.6	65.4	−3.7	75.2	+1.9	73.8	+2.0	61.4	−5.2	53.5	−0.9	42.2	−1.2	32.8	−1.3	52.3	−1.0
Spencer	38.8	+4.4	34.0	+0.7	40.1	−2.1	52.1	−0.6	65.8	+3.7	65.6	−3.9	74.6	+0.9	72.5	+0.2	63.4	−3.0	54.2	−0.7	47.0	+3.7	33.3	−0.9	53.4	+0.2
Union	37.3[a]	+4.3	31.8[a]	−1.5	38.2[a]	−5.0	49.3[a]	−1.8	63.0[a]	+2.3	65.0[a]	−1.8	73.2[a]	+2.4	71.4[a]	+1.0	62.7[a]	−2.6	54.2[a]	+0.9	41.0[a]	+0.7	30.9[a]	−0.9	51.5	−0.2
White Sulphur Springs	38.3		34.2		39.9		49.6		62.6		63.4		69.7		69.6		62.1		54.6		41.3		32.0		51.4	
Williamson	41.8	+5.6	34.8	−1.3	44.8	−2.4	54.1	−1.3	67.8	+1.9	70.4	−1.9	78.4	+2.7	76.9	+1.9	67.1	−2.9	58.2	−0.2	46.9	+1.6	35.2	−2.0	56.4	+0.1

Monthly and Annual Precipitation for the Year 1916, with Departures from Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
PANHANDLE DIVISION.																										
Bayard	5.39	+0.13	4.48	+1.04	5.44	+1.07	4.16	+0.10	4.60	+0.28	5.14	+0.08	4.17	−0.79	4.96	+0.43	6.14	+2.90	3.46	−0.02	1.62	−1.09	3.18	−0.85	52.74	+3.28
Brandywine											2.50		3.45		1.90		4.60		1.04		0.78		1.41			
Burlington	1.99	−0.61	2.00	−0.30	5.23	+2.08	4.20	+1.64	2.31	−1.56	4.23	+0.17	3.25	−0.38	1.47	−2.15	4.95	+2.20	1.48	−0.66	1.32	−0.44	1.31	−1.35	33.74	−1.36
Harpers Ferry	1.70	−1.06	3.52	+0.94	3.76	+0.67	3.64	+0.76	3.36	−0.37	8.58	+4.85	4.28	+0.99	3.60	−0.24	2.51	−0.34	2.05	−0.79	1.18	−1.10	2.46	−0.25	40.64	+4.06
Lost City	2.69	−0.51																								
Martinsburg	2.05	−0.48	3.05	+0.59	5.07	+1.94	4.05	+1.14	3.16	−0.61	7.04	+2.83	5.19	+1.29	1.56	−2.33	3.19	+0.40	2.42	−0.18	1.37	−0.79	2.64	−0.06	40.79	+3.74
Moorefield	2.73	+0.27	2.01	−0.63	4.00	+1.39	3.41	+0.63	1.83	−1.88	5.37	+1.11	2.56	−0.95	1.46	−1.77	3.15	+0.54	1.32	−0.90	0.82	−0.84	1.56	−0.73	30.22	−3.76
Piedmont	2.71		1.79		5.42		2.51		2.08		4.15		3.10		1.76		1.78		2.36		1.50		2.32		31.48	
Romney	2.08	−0.68	2.80	+0.56	6.02	+3.10	4.01	+1.44	3.01	−0.69	3.87	+0.01	2.70	−0.87	2.66	−1.29	3.15	+0.70	2.20	−0.20	1.69	−0.29	1.87	−0.63	36.06	+1.16
Upper Tract	2.40	−0.22	2.18	+0.48	2.83	+0.41	2.56	+0.23	1.05	−2.38	3.73	−0.72	3.77	+0.07	1.81	−2.33	2.80	+0.44	1.50	−0.81	0.75	−0.94	0.85	−1.43	26.23	−7.20
NORTHERN DIVISION.																										
Bens Run	5.69	+1.30	4.86	+1.65	5.58	+1.41	2.24	−1.81	4.07	−0.41	7.77	+3.21	1.28	−3.55	5.24	+1.57	3.25	+0.92	2.16	−0.70	2.10	−0.50	3.29	−0.63	47.53	+2.46
Brandonville	6.27		4.39		3.26		2.63		4.16		6.66		1.92		4.64		2.97		2.62		2.98		3.45		45.95	
Buckhannon	7.96	+3.61	5.81	+2.03	6.78	+2.37	3.97	−0.29	4.93	+0.57	5.27	−0.35	4.44	−0.89	3.56	−0.42	5.59	+2.54	3.65	+0.43	2.77	−0.62	4.50	+0.41	59.23	+10.09
Cairo	6.20	+1.77			6.78	+2.55																				
Central Station	2.71	−0.86	3.60	+0.69	4.97	+2.11	2.32	−0.49	4.21	−0.75	5.84	+1.67	5.33	+0.83	4.93	+1.93			2.20	−0.24						
Cheat Bridge	5.70		5.14		4.13		5.70		4.74		3.97		4.73		4.46		7.51		3.01		1.11					
Cortland	5.97		4.10		5.90		3.50		3.35		6.29		2.77		4.21		3.41		3.38		1.47		3.00		46.45	
Creston	6.89	+3.32	5.82	+3.13	6.71	+3.05	3.05	−0.96	4.86	+1.39	5.32	+1.00	2.92	+0.94	3.44	+0.32	3.25	+0.58	2.49	−0.26	1.84	−0.65	3.65	+0.38	50.24	+10.36
Davis	8.32		6.64		5.50		4.21		3.83		6.19		3.15		7.86		6.06		3.51		2.74		4.39		62.34	
Elizabeth	6.50		4.44		6.25		3.08		4.73		4.94		2.55		2.38		2.90		2.82		1.71		4.19		46.49	
Elkins	6.31	+2.97	4.02	+0.73	5.53	+1.46	3.43	+0.14	4.29	−0.31	4.86	−0.18	6.29	+1.65	3.13	−0.52	4.87	+2.00	2.32	−0.10	1.50	−1.36	3.20	−0.22	49.75	+6.88
Fairmont	4.84	+0.95	5.06	+2.09	4.34	+0.38	2.64	−0.91	3.43	0.59	5.23	+0.67	2.04	−2.80	4.18	+0.74	2.56	−0.04	2.56	−0.03	1.87	−0.85	3.36	−0.10	42.11	−0.49
Glenville	6.96	+2.75	6.82	+3.14	6.35	+2.28	2.65	−1.12	3.46	−0.51	4.50	+0.16	2.31	−3.17	3.76	−0.17	5.48	+2.20	2.82	−0.09	1.82	−1.21	4.16	+0.42	51.09	+4.68
Grafton	5.84	+1.86	6.31	+3.17	5.33	+1.31	3.38	−0.38	5.82	+1.52																
Lost Creek	6.65	+3.46	5.01	+2.02	4.15	+0.05	2.11	−1.39	4.61	+0.52	4.24	+0.32	3.38	−1.41	3.72	−0.41	3.87	+0.04	4.35	+1.92	1.87	−0.61	3.78	+0.25	47.74	+4.76
Mannington	4.83	+0.07	5.32	+2.88	4.42	+0.67	3.03	−1.08	4.03	+0.10	6.44	+2.59	3.00	−1.78	5.06	+1.72	3.54	+0.21	2.79	+0.13	2.11	−0.34	3.99	+0.60	48.56	+5.77
Morgantown	2.75	−1.21	4.87	+1.70	3.90	+0.09	2.86	−0.58	3.00	−0.60	6.51	+1.96	1.06	−4.19	3.67	−0.43	2.85	−0.27	1.77	−0.13	2.94	+0.05	1.97	−1.25	38.15	+4.86
Moundsville	3.89	+0.71	2.37	+0.15	2.49	−1.06	2.28	−0.89	3.87	+0.87	3.37	−0.16	1.29	−3.48	3.59	+0.76	0.89	−1.79	1.95	−0.95	1.51	−0.21				
New Cumberland	4.14	+1.48	2.27	−0.26	3.72	+0.33	3.54	+0.01	2.74	−0.45	4.54	−0.14	2.62	−1.98	3.07	−0.18	1.48	−1.04	2.61	−0.11	2.92	+0.12	2.26	−0.30	35.91	−2.52
New Martinsville	5.70	+2.03	4.46	+1.48	4.58	+0.87	2.90	−0.68	4.08	+0.49	7.14	+3.29	2.86	−2.06	5.48	+2.27	2.03	−0.71	2.98	+0.40	2.23	−0.40	3.81	+0.19	48.25	+7.17
Parkersburg	5.31	+2.15	2.75	−0.60	4.48	+0.66	2.84	−0.07	4.65	+1.19	3.30	−1.35	4.92	+0.26	2.41	−1.12	3.18	+0.46	2.53	−0.09	1.84	−0.99	3.48	+0.71	41.72	+1.39
Parsons	3.20	−1.66	4.23	+0.83	4.09	−0.21	4.33	+0.46	3.58	−0.34	5.78	+0.21	4.28	−0.98	6.05	+2.41	3.46	+0.15	0.99	−1.87	1.58	−1.00	3.06	−0.72	44.63	−2.72
Philippi	6.36	+2.17	4.18	+0.84	3.81	−0.39	1.80	−2.23	2.56	−1.67	4.79	+0.30	2.71	−2.42	5.78	+1.74	2.89	−0.33	3.25	+0.38	1.32	−1.58	3.42	−0.52	42.87	−3.71
Pickens	8.07	+1.57	9.19	+4.34	9.88	+4.49	4.58	−0.52	4.95	−0.05	5.31	−0.85	4.27	−2.08	4.34	−0.65	7.88	+4.04	2.86	−0.96	1.95	−1.93	6.28	+1.25	69.56	+8.65
Rowlesburg	7.13	+2.93	5.46	+2.55	5.98	+1.79	3.58	−0.45	4.16	−0.12	6.10	+1.23	3.66	−1.18	2.98	−0.81	5.86	+3.00	3.76	+0.91	2.59	−0.65	4.09	+0.25	55.35	+9.05
St. Marys	4.15		4.90		6.20		2.78		5.10		5.27		2.85		10.79		2.55		2.51		1.97		4.32		53.39	
Smithfield	6.26	+0.91	6.19	+2.79	4.88	+0.77	2.44	−1.51	4.50	+0.60	7.56	+3.18	2.51	−3.12	6.01	+1.95	4.04	+0.60	3.07	−0.33	2.15	−0.70	4.09	+0.03	53.70	+5.17
Terra Alta	8.52	+3.02	6.02	+2.10	6.25	+1.16	3.17	−0.87	5.46	+0.46	14.54	+7.25	2.69	−3.28	6.93	+2.23										
Wellsburg	2.66	−0.93	2.81	−0.27	3.45	+0.11	2.24	−0.90	3.25	−0.22	4.19	−0.28	1.63	−3.08	3.72	+0.17	2.26	−0.62	3.23	+0.53	2.76	+0.68	1.23	−1.98	33.45	−6.79
Weston			6.38	+2.98	5.22	+0.81													3.57	+0.59	1.96	−1.02	3.18	−0.53		
Wheeling	3.64	+0.54	3.60	+1.04	4.08	+1.03	2.78	−0.34	3.13	−0.34	4.66	+0.79	1.73	−2.94	4.79	+1.37	1.79	−0.83	2.68	+0.28	3.07	+0.64	2.66	−0.33	38.61	+0.91
SOUTHERN DIVISION.																										
Bancroft	5.28	+1.16	3.91	+0.94	4.81	+1.01	3.04	−0.85	3.28	−0.79	5.05	+0.47	2.68	−1.80	6.15	+1.67	2.36	−0.54	1.76	−1.18	1.72	−0.86	4.80	+1.67	44.84	+0.90
Beckley	5.67	+1.81	4.11	+1.01	5.04	+1.52	2.94	−1.08	3.85	+0.69	4.44	+0.11	6.44	+2.42	7.49	+4.67	7.80	+5.43	2.47	+0.09	1.40	−1.17	3.17	+0.16	54.82	+15.66
Bluefield	2.37	−0.66	3.35	−0.23	3.09	−0.69	1.90	−1.58	0.90	−2.96	2.99	−1.98	3.12	−1.43	2.81	−1.61	1.01	−1.79	2.16	−0.54	1.85	−0.63	2.40	−0.55	27.95	−14.65
Charleston	5.16	+1.46	4.93	+1.40	4.66	+0.56	4.21	+0.59	4.54	+0.65	5.33	+0.84	5.05	+0.95	5.31	+1.02	3.26	+0.32	2.45	−0.22	1.96	−0.98	4.10	+0.81	50.96	+7.40
Clay	3.77		4.23		4.35		1.25		2.05		5.29		1.60		4.12		3.55		0.93		1.55		4.37		37.06	
Cuba	7.15	+3.82	4.01	+0.96	5.45	+1.98	2.36	−0.94	3.29	−0.11	3.65	−0.32	2.00	−2.26	4.98	+2.06	2.48	+0.08	2.86	+0.03	2.10	+0.11	3.80	+0.58	44.13	+5.99
Dam 19 O.R																							3.23			
Dam 22 O.R	6.45		3.91		5.27		2.20		3.27		3.63		1.71		4.79		2.71		2.20		2.13		3.06		41.33	
Dam 26 O.R			3.12		5.34		2.87		4.24		4.64		3.65		4.10		2.33		1.83		1.07		2.89			
Dunlow	4.47								2.13		8.36		3.19		11.70		4.15				1.41		6.38			
Elkhorn	3.58	+0.43	4.09	+0.99	2.84	−1.52	2.94	−0.69	1.53	−2.62	6.57	+1.41	9.47	+3.93	3.57	−0.11	2.96	+0.12	2.63	−0.07	1.38	−1.25	1.78	−1.37	43.31	−0.58
Evans	6.78		3.07		5.78		3.13		5.14		6.83		3.23		4.05		2.59		2.84		1.91		3.23		48.58	
Green Sulphur Springs	3.55	+0.59	5.05	+2.61	4.76	+1.19	3.35	+0.12	3.10	−0.32	4.20	+0.21	5.28	+1.56	5.26	+2.10	5.05	+2.72	1.25	−0.76	1.48	−0.61	3.95	+1.38	46.28	+10.79
Hinton	3.64	+0.65	4.00	+0.93	3.27	−0.67	2.86	−0.93	2.50	−1.34	4.74	+0.65	6.22	+2.60	6.81	+3.16	3.36	+0.66	2.00	−0.41	1.06	−1.13	2.62	−0.21	43.08	+3.94
Holcomb	5.22		3.51		6.15		3.58		3.75		5.23		3.41		4.73		6.31		2.55		1.84		3.87		49.85	
Huntington	5.38	+1.70	4.59	+1.40	5.20	+0.96	2.80	−0.91	4.40	+0.47	4.80	+0.56	3.38	−1.01	5.48	+1.78	3.29	+0.98	2.20	−0.18	1.04	−1.74	4.12	+0.68	46.68	+4.66
Kaytord																			2.57		2.06		3.63			
Lanes Bottom									2.62		7.02		2.87		6.01		3.60		1.84		1.61		5.74			
Lewisburg	3.38	+0.10	3.57	−0.60	2.71	−1.31	3.13	−0.05	2.43	−1.35	5.55	+1.48	2.88	−0.99	4.74	+1.29	4.01	+1.31	1.76	+0.91	1.58	−0.72	2.30	+0.48	38.04	−0.41
Madison															8.54											
Marlinton	4.09	+0.36	3.51	+0.09	4.88	+1.06	3.10	−0.01	3.72	−0.18	5.32	+0.54	7.14	+2.21	4.78	+0.40	4.31	+1.19	1.90	+1.04	1.75	−1.06	3.38	+0.22	47.88	+3.77
Nuttallburg			3.40	+0.61	3.00	−0.76	2.80	−0.52	6.00	+2.49							5.40	+2.55			1.58	−0.86				
Point Pleasant	7.18	+3.52	3.87	+0.29	6.00	+1.97	2.62	−0.69	4.24	+0.49	3.67	−0.73	2.86	−1.20	4.10	+0.87	2.76	+0.50	2.29	−0.22	1.82	−1.02	3.91	+0.69	45.32	+4.77
Powellton	3.50	−0.35	4.06	+1.15	5.35	+0.85	3.10	−0.63	2.68	−1.28	5.24	+0.52	3.10	−1.42	15.35	+11.76										
Rainelle																			1.40							
Raleigh																			2.09		1.53		3.66			
Renick	3.10		3.20		2.50		2.35		3.06		7.40		4.25		5.06		4.40		1.20		2.00		3.30		41.82	
Robertsburg	5.80	+2.05	4.15	+1.00	5.06	+1.12	2.59	−1.28	4.34	+0.83	5.53	+1.71	2.38	−1.58	2.20	−1.24	2.02	−0.40	2.24	−0.43	1.43	−0.98	4.04	+0.43	41.78	+1.22
Ryan	5.35	+1.31	5.70	+2.42	6.04	+2.02	3.64	−0.19	3.16	−0.37	5.45	+0.09	4.26	0.58	4.42	+0.52	3.25	+0.40	2.83	−0.35	1.87	−0.66	3.60	+0.16	49.57	+1.77
Sissonville																			0.91		1.40		3.35			
Spencer	6.61	+2.44	3.69	+0.59	6.74	+3.24	2.78	−0.61	2.65	−0.96	5.54	+1.09	2.03	−2.57	4.14	+0.78	4.75	+1.67	2.09	−0.88	1.85	−0.59	4.64	+1.44	47.51	+5.64
Sutton			6.81	+3.65																						
Union	3.15	−0.56	3.40	+0.90	2.55	−1.02	2.70	−0.32	2.05	−0.60	4.55	+0.49	4.30	+0.21	7.49	+3.87	3.95	+1.23	1.90	−0.86	1.30	−0.79	2.10	−0.33	39.44	+2.22
White Sulphur Springs	2.73		3.38		2.61		2.76		2.47		4.77		3.83		4.96		2.47		2.64		1.95		2.38		36.95	
Williamson	3.80	−0.21	4.50	−1.36	3.28	−1.00	2.91	−1.14	2.32	−1.59	4.73	−0.12	4.11	−0.53	4.64	+0.70	4.10	+1.22	2.63	+0.11	1.67	−1.00	3.92	−0.01	42.61	−2.21

Monthly Maximum Temperatures for the Year 1916, with Dates.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
PANHANDLE DIVISION.																								
Bayard	66	27	60	22	72	25†	79	20	82	27	83	29	87	30	85	5†	82	4†	79	8	69	9	63	8
Brandywine													91	12†	94	22	90	8	87	7†	72	9	68	5†
Burlington	70	27	56	1†	73	26	83	20	90	28	86	27	91	12†	96	22	89[a]	8	86	8	74	9	67	5
Martinsburg	72	27	56	20	72	26†	85	20	92	28	91	27	96	12	99	22	94	8	88	8	75	9	70	5
Moorefield									97[n]	28	94	27	98	21	103[c]	22	99	8	97	8	79	9	71	5
Piedmont	67	27	64	22	73	31	84	20	88	27	84	27	92	12	98	22	87[b]	5	85	8	73	9	63	5
Romney	75	27	64	1	76	26	90	20	91	28	91	27	96	12	98	22	93	8	89[a]	8	80	9	70[a]	5
Upper Tract	70[a]	31	67[a]	22	79	25	85	20	85	8	90[b]	27	91[b]	13†	93[a]	22	89	7†	90[a]	8	75[o]	8	66[b]	5
NORTHERN DIVISION.																								
Bens Run	72	27	63	22	83	25	86	20	90	14	87	27	94	8†	95	19	90	6	87	5†	74	8	66	8
Buckhannon	72	12	63	22	86	25	84	20	88	14	80	27	90	12	92	4	85	6	82	8	70	8	68	8
Cairo	76[a]	29†																						
Central Station	72	12			84[c]		86[c]	20	91[g]	14	87[d]	26												
Creston	73	27	66	22	85	25	88	20	92	14†	91	27	96	12	96	21	94	6	91	8	76	9	69	8
Elkins	72	12	63	22	82	25	83	20	87	14	87	24	89	20	90	5	86	6	86	8	75	8	70	8
Fairmont	73	27	65	22	86	26	89	20	93	14†	89	26†	97	12†	97	20	93	13	92	8	76	8	73	8
Glenville	76	12	69	22	88	25	87	20	96	14†	90	26†	99	14†	99	22	98	6	93	7†	80	7†	70	8
Grafton	75	11	65	22†	86	25	87	20	94	28														
Lost Creek	74	12	66	22	85	26	86	20	91	15	87	26	94	14†	93	20	91	6	88	8	74	7†	70	8
Mannington	71	27	64	22	81	25†	85	20	88	14	85	27	91	27	90	21	86	5†	86	8	74	8	69	8
Morgantown	70[j]	27	62	22	82[a]	26	84	20	95	14	88	2	94	30	91[a]	4†	89	5	90	6	72	7†	72	8
Moundsville	74	27	67[a]	17	85	25	87	20	93	14	89	29	97	28†	97	21	91	7	91	8	76	2	71	8
New Cumberland	66	21	58	22	80	25	85	20	85	24	85	29	94	27†	99	21	90	7	90[a]	8	76	9	67	8
New Martinsville	72	27	68	11	78	26	86	20	92	14	88	26†	97	14	95	6†	91	6	90	8	74	8	68	8
Parkersburg	74	27	64	22	82	25	86	20	91	26	86	29	95	27	94	21	90	7	88	8	74	4	69	8
Parsons	70	27	63	22	82	25	83	19	87	13	85	23	88	11†	87	3	84	6	84	8	74	8	70	8
Phillippi	75	12	63	22	84	26	86	20	88	15	88	27†	95	31	97	21	88	6†	85	8	73	8†	67	1
Pickens	72[a]	30	62[a]	22	87	25	87	20	87	14†	82[a]	2†	85	14	83	3†	83	27	84[a]	4†	79[a]	8	67	7†
Smithfield	72	27	63	22	83	25†	87	20	91	14	87	25	93	27	92	21	88[a]	6†	85[a]	6	78	12	68	8
Tera Alta	62	22	51	12	65	27†	76	20	80	16	76	2	91	31	86	1								
Wellsburg	69	27	55	22	76[d]	26	80	20	83	26	81	24†	91	27	93	21	83	6†	83	8	68	8†	66	8
Weston			66	22	82	26											86[b]	13	87	8	75	8	72	8
Wheeling	76	27	65	22	86	25	89	20	93	24†	93	29	100	23	104	21	94	7	94	8	77	8	65	5†
SOUTHERN DIVISION.																								
Bancroft	75	27	70	22	84	25	82	19†	90[a]	14†	90	30	102	30†	93[c]	7	89	7	85	6†	76	8†	75	8
Beckley	74	30	72	12	78	25†	80	12	85	17†	85	29†	89	13†	89	3†	86	7	81	9	80	7†	74[a]	8
Bluefield	79[a]	21	62	22	78	25	80[d]	20	86[c]	26†	86[c]	30	86[c]	13†	86	7	86	7†	85	9	71[o]	8	67[a]	8
Charleston	74	12	69	23	75	25†	85	19†	94	14†	93	30	97	27	96	7	94	6	91	8	81	1	74	8
Cuba	75	27	64	22	84	25	88	20	92	26	88	26	95	30	94	3	89	7	88	8	75	2†	71	8
Dunlow	75	11†							87	12†	90	28†	93	26										
Elkhorn	71	12	65	22	78	24†	81	20†	89	26†	88	26†	89	2	87	7	87	7	82	8	70	8†	67	8
Green Sulphur Springs	72	12	66	22	82	31	83	13†	90	8	89	27†	93	26	90	6†	88	5	85	10	73	4†	69	5
Hinton	72	12	64	22	80	25	85	13†	92	28	90	27	92	12	93	11	91	7†	84	8	73	9	66	5
Holcomb	71	30	65	22	81	25	83	20	89	15	86	2†	93	8	90	19	87	6†	88	7	76	9	70	8
Huntington	70	27†	66	22	81	25	85	20	93	26	91	30	95	30	94	5†	92	7	83	8	73	4	70	8
Lewisburg	66	12	68	17	78	25	80	13†	87	28	88	30	89	12	90	7†	87	14	85	8	76	9	64	5
Madison													95[p]	12†	93[o]	5†								
Marlinton	60	12†	56	22	70	25	78	20	82	27	82	23	84	27†	88	5	80	6†	82	8	68	8	65	8
Nuttallburg									84[d]	25					82[l]	21	75[l]	5†			65[b]	4†	57[l]	5
Point Pleasant	76	27	66	22	85	25	89	20	93	26	91	27	99	27	96	7†	94	7	90	7†	76	8	72	8
Powellton	76	12	69	22	83	25	88[h]				90	30	98	11	95[e]	11								
Robertsburg	74	27	66	22	86	25	87	13	94	14	92	29	96	24	95	3†	94	6†	90	7†	76	7†	75	4†
Ryan	73	21	70	22	80	25	85	20	91	14	90	27	95	13†	93	21	89	6	88	7†	76	6	71	8
Spencer	75	12†	70	22	85	25	89	20	93	13†	89	26	94	12†	94	19	90	6	88	9	84	12	77	6
Union	68[a]	12	65[a]	22	82[a]	26	83[a]	12	88[a]	28	88[a]	26	90[a]	25†	90[a]	21	89[a]	6	86[a]	6†	72[a]	11	68[a]	7
White Sulphur Springs	70	12†	66	22	75	25	82	20	87	26	84	21†	84	13†	85	6†	82	5†	80	8	75	9	68	8
Williamson	76	31	69	22	85	24	86	20	93	14	91	30	92	2†	93	7	92	7	87	7†	76	8†	73	8

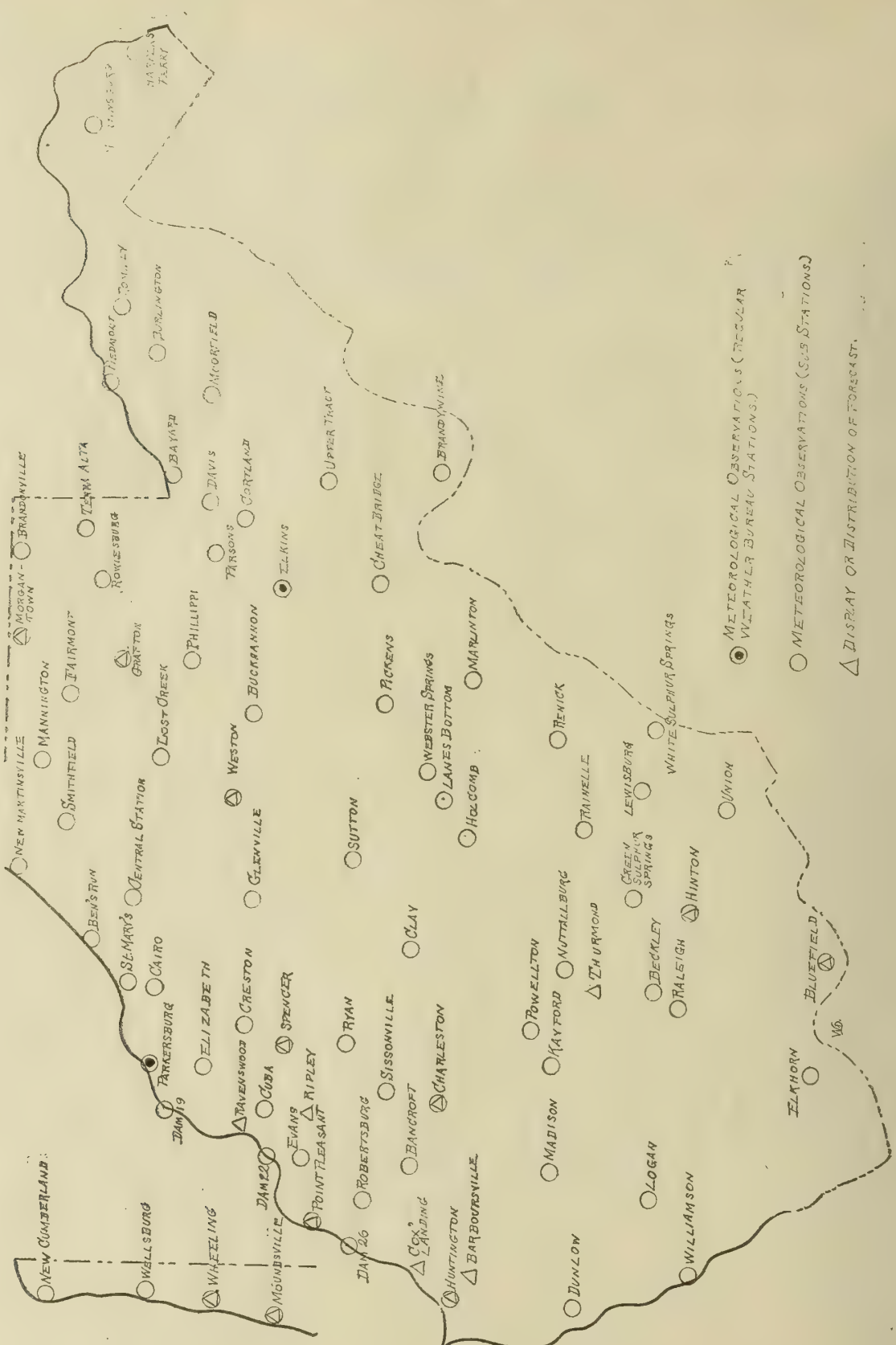
†Also other dates

Monthly Minimum Temperatures for the Year 1916, with Dates.

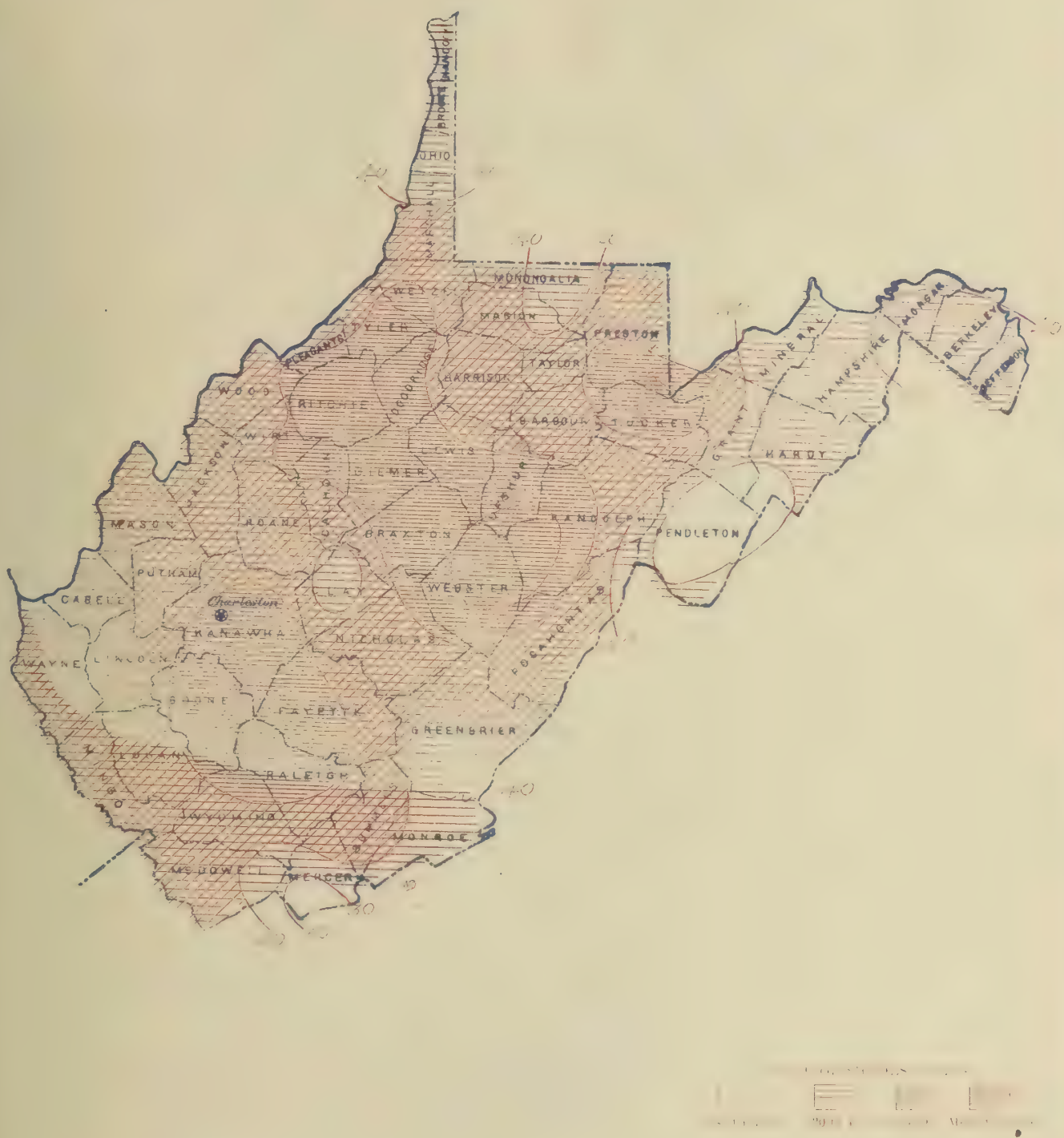
Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
PANHANDLE DIVISION																								
Bayard	− 8	17	− 8	14	2	16	20	7	34	19	35	1	42	6	41	14†	27	19	22	23	8	16	− 3	16
Brandywine											35	1	46	6	40	14†	30	20	22	26	15	16	1	14†
Burlington	− 6	8	4	14	8	18	25	7	35	19†	39	1	50	6	46	14	33[a]	19	24	27†	14	17	4	20
Martinsburg	3	9	4	14†	10	18†	30	11	40	19	43	1	55	6	51	29	39	20	30	23	22	26†	10	16
Moorefield									37[n]	19	42	1	51	6	45[e]	14	33	19	24	27	11	19	− 3	20
Piedmont	1[a]	17	0	14	9	18	27	11	34	19	40	1†	44	6	44	29	33[h]	30	25	27	15	16†	4	16
Romney	− 5	8	− 1	14	12	16	25	11	40	30†	41	1	50	6	45	14	32	19	25[a]	18†	15	17	5[a]	20
Upper Tract	− 5[a]	8†	−10[b]	14	10	17	24	7	34	19	38[n]	1	47[b]	6	42[a]	14			22[a]	11	16[b]	17	5[b]	14†
NORTHERN DIVISION																								
Bens Run	− 1	17	0	15	12	16	27	7	38	19	47	1†	56	4†	52	14	34	30	30	27	19	16	2	19
Buckhannon	− 3	8†	− 1	14	10	16	27	7	35	19	43	1	50	5†	46	14	33	19†	26	27	17	16	3	16
Cairo	− 4[a]	18	− 6[n]	14	12	16																		
Central Station	2[e]	8			10[e]	11†	25[c]	10†	29[g]	19	42[a]	1	48[p]	7										
Creston	0	8†	− 3	14	14	16	25	7	35	19	45	1	53	7	49	14†	34	30	25	27	18	17†	− 8	19
Elkins	− 5	8	− 6	14	6	16	23	7	34	19	40	1	51	6	46	14	31	30	24	27	15	16	1	16
Fairmont	− 2	17†	− 5	14	9	16†	25	7	35	19	45	1	54	5†	49	14	32	30	27	27	16	16	4	16
Glenville	− 4	8†	− 2	14	13	16	25	7	33	20	41	9	54	4†	52	29	35	19†	25	27	12	19	3	14
Grafton	− 1	17	− 5	14	9	4	25	8	33	19														
Lost Creek	− 6	9	− 8	14	10	16	24	7	31	19	42	1	48	6	45	29	30	19†	23	23	13	16	2	16†
Mannington	− 2	18	−12	14	9	16†	23	7	31	19	40	1	48	6	45	14	30	30	24	23†	14	16	− 1	18
Morgantown	− 3[d]	17	− 6	14	11[a]	4	25[a]	7	37	19	44	1	52	5	46[a]	14	32	19†	29	11	14[a]	16	1	16
Moundsville	− 1	17	− 7[a]	15	10	18	25	7	40	19†	42	4	52	6†	49	14	34	13	27	27	14	21	2	16†
New Cumberland	− 6	17	− 9	14	− 4	18	21	7	34	19†	35	1	46	6	41	29	33	19	22[a]	23	13	26	− 4	16
New Martinsville	− 1	17	− 6	14	12	16	26	7	35	19	44	1	54	7	51	14	36	30	28	27	16	16	0	19
Parkersburg	− 1	17	0	15	13	16	32	7	38	19	48	4	57	7	53	29	35	30	31	27	22	16	3	16
Parsons	− 5	9	− 6	14	3	12	19	8†	31	19	39	1	42	16	48	14†	31	19†	23	23	11	15	2	16
Philippi	− 2	17	− 6	14	10	16†	25	7	40	18	42	1	51	5†	46	14†	31	30	30	11†	14	16	0	16
Pickens	− 9[a]	18	−10[a]	14	2	11	22	7	30	19	39[a]	1	49	5†	43	14	30	30	25[a]	27	13[a]	15	− 3	14
Smithfield	− 1	17†	− 8	14	11	16	23	7	33	19	43	1	50	6	43	15	33	20	29	23	20	16†	2	18
Terra Alta	− 8	8†	− 9	14†	3	18	19	4	34	19	38	1	58	1†	42	14								
Wellsburg	− 4	17	− 5	14	3[d]	18	24	7	36	19	43	1	55	5†	49	14	34	19	30	23	16	16	0	16
Weston			2	4†	10	16											30[h]	30	28	27	17	16	4	16
Wheeling	− 1	17†	− 7	14†	9	16†	26	7	36	19	44	1†	44	6	49	14	35	19†	29	27†	17	16	1	16
SOUTHERN DIVISION																								
Bancroft	− 2	17	0	14†	8	4	27	10	38[a]	19	47	1	55	4†	50	14	35	30	30	23†	19	16†	− 4	16
Beckley	− 6	17	1	14	9	1	16	9	29	19	42	1†	51	5	45	25	32	30	28	26†	16	15†	− 1[a]	14†
Bluefield	0[a]	18	4	14†	10	4†	27[d]	7†	36[b]	19	45[e]	1	59[l]	23	46	25	33	20	30	11†	15[b]	16	1[a]	16
Charleston	1	18	5	14	14	4†	29	7	38	19	49	1†	54	7	53	14†	38	30	29	27†	22	19†	5	16†
Cuba	0	19	− 6	14	9	16	23	10	33	19	43[g]	22	53	6	47	29	31	30	25	27	16	16	−12	19
Dunlow	0	8†							29	8														
Elkhorn	2	18	6	14	11	4	22	10	36	20	47	1	54	5	51	14†	36	30	32	11†	19	16†	6	14†
Green Sulphur Springs	− 6	17	3	14	10	1†	17	10	30	18	43	9	46	7	48	14	31	30	21	27	11	26	0	16†
Hinton	0	18	7	14†	11	4	25	10	36	19	46	1	54	6	53	14†	37	30	28	27	16	26	5	18†
Holcomb	− 9	18	− 3	14	7	16	18	10	30	19	37	1	43	7	45	25	30	20	24	27	14	26	0	16
Huntington	3	17†	5	14†	13	4	30	10†	38	19	51	1†	53	5	52	15	36	30	30	27	21	15†	4	19
Lewisburg	− 4	9	2	14	9	4†	24	7†	32	19	40	1	49	6	45	14	30	20	22	27	14	17†	0	20
Madison															55[n]	15†								
Marlinton	−10	8†	2	14	8	1†	20	7	28	19	36	1	48	5	44	14†	30	19†	16	27	10	17	− 8	19
Nuttallburg									33[d]	29					47[i]	14	32[i]	20			15[h]	16	2[i]	15†
Point Pleasant	− 4	17	− 4	14	9	4	27	7†	33	19	44	1	52	5†	48	14	30	30	25	23	18	16	− 4	19
Powellton	0	18	5	14	15	4†	22[b]	10			46	1	52	6	51[e]	14†								
Robertsburg	− 1	17†	− 3	14	5	4	26	7	43	5†	46	4			50[d]	14†	37	17	29[f]	27	19	16†	1	16†
Ryan	− 7	8	− 5	14	10	4	24	7	30	19	45	11	48	7	47	28	29	30	23	27	16	16†	−18	19
Spencer	− 5	8	− 5	14	11	5†	23	7	31	18	40	13	49	5	41	31	29	30	23	28	18	26	−14	19
Union	2	17†	4	14	6	1	25	7†	33	19	41	1	50	5	46	14	32	20	23	27†	14	26	2	14
White Sulphur Springs	− 3	9	3	14	10	16	22	7†	31	20	40	1	50	5†	46	14†	39	20	30	29	13	17†	1	20
Williamson	7	17†	10	14†	12	4	30	11	41	19†	52	9	58	6	59	25	40	30	33	27	19	16	5	16†

† Also other dates.

CHART SHOWING LOCATION OF OBSERVATION AND FORECAST DISPLAY STATIONS



TOTAL ANNUAL PRECIPITATION, 1916



COOPERATIVE STATIONS AND OBSERVERS

Station.	Observer.
Bancroft	R. E. Dent
Bayard	G. C. Dixon
Beckley	John A. Ewart
Bens Run	J. D. Riggs
Bluefield	Norfolk & Western Railway Co.
Brandonville	W. T. Miller
Buckhannon	H. A. Darnall
Burlington	J. W. Vandiver
Cairo	Van. A. Zevely
Central Station	D. H. Doak
Charleston	C. V. Lewis
Clay	Prof. E. H. Knabenshue
Cortland	Samuel Harmon
Cheatbridge	Walter Cole
Creston	*J. M. Reed
Cuba	C. T. Perry
Dam 19, O. R	*Lockmaster
Dam 22, O. R	*U. S. Engineer Office
Dam 26, O. R	*U. S. Engineer Office
Davis	Ross C. Male
Dunlow	George Damron
Elizabeth	E. D. Ball
Elkhorn	J. J. Lincoln
Elkins	U. S. Weather Bureau
Evans	B. F. Sayre
Fairmont	*F. P. Hall
Glenville	*M. T. Brannon
Grafton	W. C. Byers
Green Sulphur Springs	W. H. Gwenn
Harpers Ferry	*S W. Lightner
Hinton	*J. B. Lavender
Holcomb	R. C. Ferguson
Huntington	*L. H. Hutchinson
Lands Bottom	**C. A. Droddy
Kayford	**Cabin Creek Con. Coal Co.
Lewisburg	George T. Argabrite
Logan	C. & O. Ry.
Lost Creek	Allen Smith
Madison	S. E. Bradley
Mannington	Jas. A. Morgan
Marlinton	S. L. Brown
Martinsburg	G. W. Van Metre
Moorefield	M. S. Henkel
Morgantown	Prof. Edgar L. Andrews
Moundsville	M. Z. White
New Cumberland	M. F. Smith
New Martinsville	Wm. Ankron
Nuttallburg	Miss Donna Tully
Parkersburg	U. S. Weather Bureau
Parsons	J. W. Swisher
Philippi	Okey J. Robinson
Pickens	Dr. J. L. Cunningham
Piedmont	C. A. Suter, Jr.
Point Pleasant	*W. D. Holmes
Powellton	S. C. Lampert
Rainelle	**A. L. Guthrie
Raleigh	**Raleigh Coal & Coke Co.
Renick	**W. B. Hill
Robertsburg	E. C. Brace, Jr.
Romney	Geo. E. Arnold
Rowlesburg	*J. F. Pierce
Ryan	W. E. Ryan
Saint Marys	*William Hughes
Smithfield	**G. M. Whisler
Spencer	A. M. McKown
Sutton	Ben Gillespie
Terra Alta	C. F. Dodge
Union	J. M. Shanklin
Upper Tract	J. M. Mallow
Wellsburg	C. P. Waugh
Weston	State Hospital
Wheeling	*Miss M. B. Forsyth
White Sulphur Springs	J. M. Ayres
Williamson	*J. F. Keyser

* River Observer. ** Special Rainfall Observer.

FORECAST DISTRIBUTORS AND DISPLAYMEN

[By Cards, Maps and Flags]

Station.	Distributor.
Bluefield—5	Norfolk & Western Railway Co.
Buckhannon*	Postmaster
Charleston—62*	Assistant U. S. Engineer
Elkins—295†	Local Office, U. S. Weather Bureau
Grafton—62	Postmaster
Hinton—23	J. B. Lavender
Morgantown—22	Postmaster
Parkersburg—548†	Section Center
Point Pleasant—49	Miss Grace Henson
Ripley*	B. R. Parsons
Weston—44	Postmaster

Figures represent number of places supplied with forecast cards.

* Flag display station. † Forecast cards and maps.

[By Telephone Companies.]

Arbuckle & Ripley Tel. Co.
Barboursville Tel. Co.
Beverly & Marlinton Tel. Co.
Bluefield Tel. Co.
Central District Tel. Co.
Chesapeake & Potomac Tel. Co.
Citizens United Tel. Co.
Consolidated Tel. Co. of West Virginia.
Durbin Tel. Co.
Eastern Pendleton Tel. Co.
Enterprise Tel. Co.
Greenwood Tel. Co.
Peoples Tel. Co.
Ravenswood Tel. Co.
Union Ridge & Ohio Valley Tel. Co.

J E

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY
FEB 23 1917

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JANUARY, 1917

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
FEBRUARY 20, 1917

Departure of the Mean Temperature from the Normal, January, 1917.



Shaded portions show excess (+). Unshaded portions show deficiency (−). Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXV. PARKERSBURG, W. VA., JANUARY, 1917. No. 1.

GENERAL SUMMARY.

January was slightly warmer and considerably wetter than usual, with the snowfall slightly below the average and the sunshine somewhat above. The precipitation was favorably distributed and the month was free from periods of unusually low temperatures. During the coldest weather the ground was protected by snow; but after the 21st the conditions were unfavorable for winter grains and grass, owing to alternate periods of thawing and freezing, with lack of snow cover. Heavy rain and melted snow on the 21st, attending seasonally high temperature, caused marked floods in the Monongahela and Little Kanawha rivers and tributaries. Considerable damage resulted from flooding, especially in Weston and Cairo. At Cairo the river rose 9 feet in one hour and thirty minutes, giving the highest stage ever known. The river was gorged below Cairo.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.08 and 30.09 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.82 inches on the 15th, and 29.40 inches on the 5th. Elkins, 30.82 inches on the 8th, and 29.41 inches on the 10th.

TEMPERATURE.

The monthly mean for the State, 50 stations reporting, was 33.3°. The mean departure from the normal for 42 stations having ten or more years of record was +0.4°. The temperature was above the normal from the 1st to the 10th, on the 21st and 22d, and from the 27th to the close of the month, the highest readings occurring on the 31st. Cold weather prevailed from the 11th to the 18th, with the lowest temperatures occurring generally on the 12th and 15th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 80 per cent; 8 p. m., 80 per cent. The January averages for the same hours for the past 28 years are 83 and 78 per cent, respectively. Elkins, 8 a. m., 81 per cent; 8 p. m., 76 per cent. The January averages for Elkins for the same hours for the past 17 years are 85 and 79 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 64 stations reporting, was 4.66 inches. The departure from the normal for 44 stations having ten or more years of record was +0.77 inch. Precipitation was quite general from the 1st to the 6th, 10th to the 15th, and on the 21st-22d and 28-29th, that from the 10th to the 15th being mostly snow, with falls ranging generally from 3 to more than 12 inches. Light to moderate snow also fell on the 25-26th. The rainfall was heaviest on the 3d, 5th, and 21st, the amounts on the 21st ranging generally from 1 to 3 inches.

WIND.

The average wind velocity at Parkersburg was 6.3 miles per hour, or 0.1 mile above the January average for the past 27 years. The average at Elkins was 5.1 miles per hour, or 0.1 mile above the January average for 17 years. The highest velocity at Parkersburg was 33 miles per hour from the northwest on the 14th, and at Elkins 24 miles per hour from the west on the 26th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 34 per cent of the possible amount, or 6 per cent above the January average for 19 years. The average at Elkins was 35 per cent, or 9 per cent above the January average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bayard, 29th; Charleston, 2d; Clay, 2d; Davis, 1st; Elkins, 4th; Mannington, 4th; New Cumberland, 3d, 4th, 24th, 29th, 30th, and 31st; Pickens, 16th and 18th; Rowlesburg, 4th; Smithfield, 4th and 5th; Terra Alta, 21st; Williamson, 2d; Wheeling, 4th, 15th, 16th, 24th, 29th, and 31st.

Haze: Bayard, 16th, 17th, and 27th.

Halos, lunar: Bayard, Brandywine, Elkins, Parkersburg, and Pickens, 6th.

Sleet: Bancroft, 1st; Bayard, 18th and 21st; Bens Run, 21st; Brandywine, 21st; Burlington, 3d; Charleston, 1st; Clay, 1st; Elkins, 18th and 21st; Lost Creek, 21st; Marlinton, 1st, 3d, 4th, 14th, 21st, and 29th; Moorefield, 21st; Morgantown, 18th; Pickens, 18th; Piedmont, 14th; Romney, 3d and 13th; Terra Alta, 18th; Wheeling, 11th.

Thunderstorms: Lewisburg, 27th; Creston, Cuba, Evans, Fairmont, Robertsburg, Rowlesburg, and Smithfield, 31st.

Lunar eclipse was observed generally throughout the State on the evening of the 7th.

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	31.7	..	..	3.34	..	..	..	..	..	..
1892	29.4	76	— 3	8.15	..	..	..	..	..	..
1893	22.6	71	—25	2.49	..	..	..	..	..	..
1894	36.6	70	8	2.41	4.23	0.83	..	5	7	11
1895	25.0	69	—21	4.48	6.53	2.37	..	6	9	15
1896	32.4	72	— 6	1.57	2.72	0.67	1.8	9	14	8
1897	28.8	69	18	1.70	2.85	0.90	4.0	10	7	14
1898	37.1	75	— 5	5.10	8.04	2.24	5.0	6	9	16
1899	32.1	70	—21	4.05	7.01	2.05	7.5	10	7	14
1900	31.5	74	—10	2.24	3.60	0.82	1.9	9	7	14
1901	33.6	69	— 4	2.41	3.87	1.18	7.3	8	7	16
1902	30.2	64	— 1	3.65	8.52	1.45	9.8	9	7	15
1903	31.8	79	7	3.21	6.45	1.55	8.6	8	7	16
1904	27.5	72	—18	2.72	5.82	1.24	10.8	9	8	14
1905	26.4	70	14	3.15	7.43	1.48	22.0	7	7	17
1906	38.2	80	— 5	3.79	8.70	1.36	5.1	11	7	13
1907	38.7	76	—15	6.41	11.54	2.35	5.6	6	7	18
1908	31.0	62	16	2.92	8.19	0.50	12.8	12	7	12
1909	36.8	76	— 5	3.41	6.59	1.50	8.7	8	6	17
1910	32.0	67	— 5	5.08	10.10	2.52	15.4	6	6	19
1911	37.3	71	- 5	5.86	12.63	3.11	7.0	8	6	17
1912	28.5	66	—34	2.60	6.93	1.10	13.6	7	8	16
1913	40.7	74	9	6.23	10.53	1.84	5.7	9	6	16
1914	35.8	83	—11	3.18	5.65	1.55	15.6	7	6	18
1915	31.7	68	8	4.85	11.38	2.00	10.4	8	6	17
1916	38.8	79	10	4.86	8.52	1.70	6.1	11	7	13
1917	33.2	77	9	4.66	7.67	1.72	8.3	11	6	14
Means and Extremes	32.5	80	34	3.72	12.63	0.50	8.8	9	7	15

Climatological Data for January, 1917.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	28.8	−0.3	61	31	0	12	36	6.39	+1.12	2.55	7.4	18	8	5	18	w.	G. C. Dixon.
Brandywine	Pendleton		0	34.5		59	31	7	12	34	1.82		0.55	3.3	10	17	3	11	s.	Elmer Keister.
Burlington	Mineral	875	22	31.2	0	56	3†	5	15	35	4.07	+1.76	1.80	8.0	8	10	16	5	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27								2.18	−0.65	0.65	3.6	6				w.	S. W. Lightner.
Martinsburg	Berkeley	435	24	32.9	+2.0	60	10	12	12†	32	2.66	+0.15	0.80	8.5	8	18	4	9	w.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	35.7	+3.4	64	31	5	17	40	2.52	−0.06	0.82	7.0	8	23	1	7		M. S. Henkel.
Piedmont	Mineral	919	0	32.5		57	22	7	15	33	3.80		1.04	1.8	10	13	9	9	se.	C. A. Suter, Jr.
Romney	Hampshire	824	19	34.3[a]	+3.1	59[a]	8†	8[a]	14†	43[a]	3.16	+0.43	1.12	6.0	8	12	11	8	w.	Geo. E. Arnold.
Upper Tract[b]	Pendleton	1,230	18	33.3	+0.5	60	5†	10	13	33	1.72	−0.89	0.60		4	12	9	8	w.	J. M. Mallow.
Averages and	Extremes			32.9	+1.4	64	31	0	12	43	3.15	+0.27	2.25	5.7	9	14	7	10	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	32.6	−0.2	71	31	3	15	41	6.10	+1.63	1.75	22.0	13	19	4	8		J. D. Riggs.
Brandonville	Preston	1,809	6								5.73		2.20	8.0	7					W. T. Miller.
Buckhannon	Upshur	1,411	20	33.4	+1.0	70	31	2	12	37	6.34	+1.86	1.40	8.0	11	10	6	15		H. A. Darnall.
Cairo	Ritchie	674	14																	Van A. Zevely.
Central Station	Doddridge	950	19																	D. H. Doak.
Cheat Bridge	Randolph	3,600	4																	Walter Cole.
Cortland	Tucker	3,300	1								5.18		1.90	8.5	10					Samuel Harmon
Creston[f]	Wirt	701	15	31.7		74	31	−2	15	45	4.55	+0.78	1.55	9.0	10	8	3	14	w.	J. M. Reed.
Davis	Tucker	3,093	8								6.87		2.56	10.0	15	8	4	19	sw.	Ross C. Male.
Elizabeth	Wirt	646	5								5.31		2.00		11					E. D. Ball.
Elkins	Randolph	1,940	16	32.6	+3.6	70	31	3	12	43	4.58	+1.24	1.80	7.0	17	4	9	18	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	32.2	−2.2	72	31	5	12†	42	5.19	+1.26	1.74	8.5	14	14	3	14	w.	F. P. Hall.
Glenville	Gilmer	738	23	35.1	+1.7	76	31	−1	17	48	5.03	+0.73	1.60	8.0	13	9	14	8	w.	M. T. Brannon.
Grafton††	Taylor	1,000	24	33.2[b]	+0.3	[b]	31	1[b]	12	41[b]	4.49	+0.43	1.08	9.5	9	13	1	17	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	33.0	−0.5	71	31	−3	17	44	4.26	+0.20	2.16	9.2	12	10	3	18	w.	Allen Smith.
Mannington	Marion	974	14	31.7	−0.4	71	31	−3	17	44	5.25	+0.49	1.89	9.5	16	5	10	16	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	32.9	+0.2	69	31	2	12	39	4.19	+0.26	0.80	8.8	16	14	2	15	sw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	14	33.0	−0.1	71	31	2	17	44	3.49	+0.26	1.20	6.5	8	17	4	10	sw.	M. Z. White.
New Cumberland	Hancock	987	19	26.8[d]	−2.1	60	31	−9	15	36[d]	4.22	+1.47	1.42	10.8	14	8	12	11	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	32.0	−1.2	70	31	−1	15	41	4.98	+1.23	1.00	4.0	11	11	3	17	s	Wm. Ankrom.
Parkersburg	Wood	638	28	33.2	+1.8	72	31	4	17	38	5.71	+2.52	1.80	14.3	18	7	8	16	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	31.5	−0.5	71	31	−1	11	46	5.23	+0.41	2.17	8.0	9	10	3	18		J. W. Swisher.
Philippi	Barbour	1,149	20	32.2	−1.0	73	31	−1	15	47	4.63	+0.35	1.10	15.9	10	10	21	0	w.	Okey J. Robinson.
Pickens	Randolph	2,697	14	32.4	+0.6	63	31	−7	12	40	7.67	+1.11	2.61	16.0	17	10	5	16	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30								6.04	+1.66	2.25		16				w.	J. F. Pierce.
Saint Marys	Pleasants	577	8								5.75		1.65	6.9	14				s.	Wm. Hughes.
Smithfield	Wetzel	835	11	31.0	−1.4	70	31	0	15†	44	6.66	+1.23	1.87	14.0	16	15	9	7	nw.	G. M. Whisler.
Terra Alta	Preston	2,612	16	29.1	+0.7	66	31	−1	15	38	4.15	−1.56	1.80	11.0	13	15	1	15	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	28.6	−1.2	58	31	0	15	35	3.30	−0.25	1.20	7.1	12	8	10	13	w	C. P. Waugh.
Weston	Lewis	1,026	21	34.6	+0.6	72	31	3	17	41	4.13	−0.05	1.69	10.0	11	11	8	12		Weston State Hospital.
Wheeling	Ohio	645	30	30.8		61	31	−2	15	34	4.81	+1.69	1.42	8.5	15	14	1	16	s.	Miss M. B. Forsyth.
Averages and	Extremes			31.9	+0.0	76	31	−9	15	48	5.16	+0.84	2.56	9.9	13	11	7	13	w.	
Southern Division.																				
Bancroft	Putnam	574	12	34.8	−0.7	76	31	4	12	42	4.96	+0.75	1.63	10.0	14	14	1	16	s.	R. E. Dent.
Beckley	Raleigh	2,440	16																	John A. Ewart.
Bluefield	Mercer	2,558	21	38.8	+4.1	68	31	5	12	38	4.17	+1.17	1.40	2.0	7	15	4	12		Norfolk & Western Ry
Charleston	Kanawha	597	13	40.4	+0.9	77	31	7	12	46	5.29	+1.55	0.98	9.2	15	7	0	24	w.	G. V. Lewis.
Clay	Clay	706	0	34.4[a]		66[a]		6[a]	12	40[b]	4.28		1.25	8.0	9	11	7	13		Prof. E. H. Knabenshue
Cuba	Jackson	650	14	32.8	−1.3	74	31	−8	15	43	4.62	+0.89	1.70	5.4	11	8	11	12	nw.	C. T. Perry.
Dam 19 O. R.		557	0								4.80		1.57	9.5	15					Lockmaster.
Dam 22 O. R.	Jackson	538	1								4.83		1.28	10.8	13				w.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0								4.46		1.86		13				nw.	U. S. Engineer Office.
Dunlow	Wayne	703	8								5.44		2.04	4.0	7	18	2	11	sw.	James W. Damron.
Elkhorn	McDowell	1,933	23																	J. J. Lincoln.
Evans	Jackson	606	0	35.0		68	31	0	15	36	5.17		1.06	14.5	14	12	4	15		B. F. Sayre.
Green Sulphur Spgs	Summers	1,600	20	33.1	−0.2	70	31	3	12	40	5.03	+2.04	1.50	6.5	9	10	4	17	n.	W. H. Gwinn.
Hinton	do	1,450	19	35.2	+0.2	65	31	6	12	44	3.28	+0.24	1.06	1.0	12	9	2	20	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	32.8		70	31	−2	12	42	4.92		1.38	8.0	9	6	6	19		R. C. Ferguson.
Huntington	Cabell	538	20	34.1	+0.7	73	31	9	14[b]	39	5.31	+1.63	1.46	16.1	14	8	2	21	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	0								4.66		0.85		15					CabinCreek Con.Coal Co
Lanes Bottom	Webster	2,062	0								5.74		1.52	3.0	8	11	0	20	n.	C. A. Droddy.
Lewisburg	Greenbrier	2,200	16	34.6	+1.9	65	31	3	15	35	2.71	−0.58	0.58	3.5	10	3	11	17	nw.	Geo. T. Argabate.
Logan	Logan	687	13																	Agent C. & O. Ry.
Madison	Boone	704	10																	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	29.4	+0.2	56	31	2	12†	32	4.63	+0.87	0.32	8.5	11	7	13	11	nw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23	32.4	+0.6	63	21	5	15	35										Miss Donna Tully.
Point Pleasant	Mason	553	23	33.4	−0.8	73	31	−5	15	46	5.48	+1.69	1.80	13.5	11	8	3	20	sw.	W. D. Holmes.
Powellton[e]	Fayette	933	20	37.8	+0.8	75	31	6	12	40						9	7	10		S. C. Lampert.
Rainelle	Kanawha	2,425	0																	A. L. Guthrie.
Raleigh	Beckley	2,130	0								5.40		1.08	5.0	12					Raleigh Coal & Coke Co.
Renick	Greenbrier	1 653	0								4.62		1.11		11				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	16	34.0[c]	−0.5	74	31	7[c]	20	44[c]	4.96	+1.08	1.72	11.0	14	4	5	22		E. C. Brace, Jr.
Ryan	Roane	700	13	32.1	−2.3	76	31	−5	17	48	4.81	+0.67	0.96	11.9	16	4	10	17		Wm. E. Ryan.
Sissonville	Kanawha	625	0								4.28		1.37		8					J. N. Johnson.
Spencer	Roane	784	12	37.3	+3.0	68	26	−4	16	61	5.30	+1.01	3.00	8.0	9	6	6	19		A. M. McKown.
Sutton	Braxton	839	10																	Ben Gillespie.
Union	Monroe	2,250	12	36.4[a]	+3.1	68[a]	1	2	12	44[a]	2.75	−0.91	1.00	0	5					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	36.2		69	31	4	12	40	3.07		0.60	2.0	8	21	1	9		J. M. Ayres.
Williamson	Mingo	660	16	37.8	+1.2	74	31	10	12	38	5.38	+1.38	1.10	3.0	15	11	6	14	w.	J. F. Keyser.
Averages and	Extremes			34.9	+0.6	77	31	−8	15	61	4.66	+0.90	3.00	7.3	11	10	5	16	nw.	
State Averages and	Extremes			33.3	+0.4	77	31	−9	15	61	4.66	+0.77	3.00	8.2	12	11	6	14	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

e Approximated by the observer

Daily Precipitation for January, 1917.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac	.43		.95		.46	.21			.23	T.	.01	T.	.26	.39	.06	T		.09	.01		1.23	1.32			.01	.03		.08	.48	.08		6.39
Brandywine	do			.16	.12	.15						.05		.03	.45	.16						.55							.15	.06			1.82
Burlington	do			.53		.51								.30		.30			T.			*	1.80			T.			.20	.43			4.07
Harpers Ferry	do			.65	T.	.22									.46		.10						.50						.25				2.18
Martinsburg	do			.47		.38				.03				.15	.33	.20						.80							.30				2.66
Moorefield	do			.47		.21								.05	.10	.15						.82							.40	.32			2.52
Piedmont	do			.50			.41			.03				.22	.13	.17			T.			1.04	.82		T.	T.			.16	.32			3.80
Romney	do			.35		.44				T.			.10	.30	.20							1.12							.20	.45		T.	3.16
Upper Tract	do				.60	T.						T.					.52					.50									.10		1.72
Northern Division.																																	
Bens Run	Ohio	.12		.90		.77						.04		.26	.52	.27			.09			1.10	.65			.30			.50	.58			6.10
Brandonville	Monongahela			.60		.35					.17				.70	.80							2.20								.91		5.73
Buckhannon	do	.15		.96	T.	.58				T.	T.	.10		.50	.40	.30						1.40	.90			.20			T.	.85			6.34
Cairo	Little Kanawha																																
Central Station	Middle Is. Creek																																
Cheat Bridge																																	
Cortland	Monongahela	.20		.64		.41					.26				.35	.40							1.90						.45		.38	.19	5.18
Creston	Little Kanawha				.50	.30		T.				.10	T.		.60	T.	.50	T.	T.			T.	1.55			.10	T.		.60	.10	.20		4.55
Davis	Monongahela	T.	.09	.85	.40	.23					.12	T.	.10		1.00	.20	.10		.10				2.56			.10	.10		.30		.62		6.87
Elizabeth	Little Kanawha			1.18		.30	.05					.05			.60		.34						2.00			.10			.41	.04	.24		5.31
Elkins***	Monongahela	.02		.78	.06	.53				.04	T.	.06		.29	.25	.16	T.	T.	T.			1.71	.09		T.	.03	.01	.10	.14	.26		.05	4.58
Fairmont	do	.03	.03	.78		.35	.31				.03	.02	T.		.78	T.	.30		T.	T.			1.74			.17	.04		.26	T.	.35		5.19
Glenville	Little Kanawha	.06		.81		14	.32				.06				.12		.82					.30	1.60			.12			.38	.20	.10		5.03
Grafton	Monongahela	T.		.68		.40					T.			.83		.48						1.08				.20	.15		.39	.28			4.49
Lost Creek	do	.11	T.	.05		.34				T.		.03		.30	.40	.30	T.		T.			1.21	.95			.13	T.		.24	.20			4.26
Mannington	do	.10		.77		.47	.14			.03	.02	.03	T.	.20	.52	.25		T.	.03	T.		.79	1.10		T.	.17	T.		.30	.33			5.25
Morgantown	do	.06		.20		.31				.33	.01	.01		.20	.51	.27			.05			.66	.80			.35	.01		.16	.26			4.19
Moundsville	Ohio					.82	.16						T.	T.	.10	.40			.10				1.20			T	.05			.66			3.49
New Cumberland	do	.02		.56		1.04				.16	.02	.02		.20	.35	.05		.02	.10			.50	.92							.26		T.	4.22
New Martinsville	do	.10		.60		.58				.05	T.	T.			.75	.20		T.	T.			1.00	.65		T.		.15		.30	.60			4.98
Parkersburg ***	Ohio	.0		.88	.03	.36				T.	.01	.03	T.	.56	.41	.36		.02	.07			1.80	T.		.11		.01	.47	.01	.36		.15	5.71
Parsons	Monongahela			.83		.43					T.	.46	.20		.30				T.				2.17			.20	.10			.54		T.	5.23
Philippi	do	.01		.77		.33	.12					.20		.40		.80						1.10	.60			.30							4.63
Pickens	do	.34		.93	.13	1.04	.41			.25	T.	.40	.10	.24	.30	.30	.20		T.			2.01	.38			10	.10			.44			7.67
Rowlesburg	do	T.	.12	.64	.15	.32	.31				.10	T.	.06		.81		.32			.08	.04		2.25			.09	.05	T.	.30		.40		6.04
Saint Marys	Ohio	.15	T.	.98		.42	.12				.02			.95		.28			.02	.04		.05	1.65			.10	T.		.52	T.	.45		5.75
Smithfield	Fishing Creek	.48		.85		.60	.22				.05	.05		.59	T.	.40			.10	.10		T.	1.87			.30	.10		.58	.05	.32		6.66
Sierra Alta	Monongahela			.25		.50				.10	.10			.10	.20	.30			.10			.60	1.20			.10			.30	.30			4.15
Wellsburg	Ohio	.20		.40	T.	.60				.05				.10	.30	.10			.20			1.00	.20						.10	.05			3.30
Weston	Monongahela	.05		.68		.30	.05				.10	.10		.15	.40							.60	1.00							.70			4.13
Wheeling	Ohio	.09	.01	.51		.60	.40				.06	.03	T.	.03	.97		.07		.05	T.			1.42			T.	.04	T.	.31		.22		4.81
Southern Division.																																	
Bancroft	Great Kanawha	*		.60	.15	.45	.22					.10		T.	.65		.50					.09	1.63			.20			.18	.14	.05		4.96
Beckley	do				1.40	.40		.14																					.25	.42			†††
Bluefield	do	.17		.80	.55	.40						.20											1.40							.65			4.17
Charleston	do	T	.28	.48	.12	.25	.75				.10				.83	.40	.17			T.		.25	.98			.10			.30	.20	.08		5.29
Clay	do	T.		.51		.35	.67				.20	.30		T.		.20			.30			T.	1.25			T.			.40	T			4.28
Cuba	Sand Creek	T.		1.20	T.	.45					T.	T.		.05	.04	.40						1.00	.70		T.	.05			.43	.25		.05	4.62
Dam 19 O. R.	Ohio	.02	.04	.65		.45	.08				.01	.02	T	.01	.70		.21		.01	T		T.	1.57						.54	.02	.47		4.80
Dam 22 O. R.	do	.07	T.	1.09		.28	.13					.03	T.	T.	.87		.19					.30	1.28			.04			.35	.05	.15		4.83
Dam 26 O. R.	do	.06		.60		.26	.37					.06			.60		.21					.06	1.80			.06			.25	.05	.08		4.46
Dunlow	Big Sandy				1.04					.30	1.75		2.04							.04						10	.17						5.44
Elkhorn	do																																
Evans	Ohio	.11	T.	.64		.53						.07	.10	.33	.56	.32						1.06	.72			.09			.26	.14		.24	5.17
Green Sulphur Spgs.	Great Kanawha					.60	1.50							.20	.10	.25						.25	1.50			.10				.53			5.03
Hinton	do	T.		.08	.14	1.06	.30				.02	T.			.28		.14					.04	.80			T.			.06	.22	.14		3.28
Holcomb	do	.23		.29	.29	.90					.60		T.	.19					.56				1.38			T.	T.			.48			4.92
Huntington	Ohio	.02		.60	.20	.44	.20			T.	.18	T.	.02	1.15		.54						.14	1.32			.18			.18	.14			5.31
Kayford	do		.08	.22	.15	.36	.85				.05	.10		.48	T.	T.			.16			.06	.70	.40		T.	T		.40	.15	.50		4.66
Kanes Bottom	Great Kanawha			.75	.44	1.25								.50		.20						1.52			T.				.52	.56			5.74
Lewisburg	do	.07		.26	.48	.29	.11				T.		.05	.30		T.						.32	.58							.25			2.71
Logan	Guyandotte																																
Madison																																	
Marlinton	Great Kanawha	.12		.48	.32	.61				T.	T.	T.		.50	.65	.10						.89	.43		T.	T.	T.		.31	.22			4.63
Nuttallburg	do									T					.60														.30				†††
Point Pleasant	Ohio	.09		.90		.38	.10					.10		T.	1.25		.28						1.80						.40	.12	.06		5.48
Powellton												.20		.15									1.30					.30		.35			†††
Raimelle	Great Kanawha																																
Raleigh	do	.12	T.	.38	.32	1.08	.62				T	T.		.65	.50		.20						.95						.22	.30	.06		5.40
Scenic	do	.10		.40		.40	.50							.40	T.					1.00		.70	.40					.02		.30		.40	4.62
Robertsburg	do	.05		.73	.06	.35	.25				.10			.65		.50						.12	1.90			.06	T.	T.	.23	.16	.10		4.96
Ryan	do	.08		.53	.10	.53	.08			T.	.10		.30	.34	.54	T						.96	.50		T.	.15	.10	T.	.30	.17		.03	4.81
Sissonville		T.	T.	.52	.13	T.	.59	T.	T.	T.		T.	T.		.85						.26	T.	1.57			T.	T	.40	T	.16			4.28
Spencer	Little Kanawha	.05		.93		.32	T.				.20	.20	T.	.22	.08	.30					T.	3.00											5.30
Sutton	Great Kanawha																																
Union	do	.30		.20	1.00																		.90						.35				2.75
White Sulphur Spgs.	do			.25	.50	.30								.20								.60				.50	.32			.40			3.07
Williamson	Big Sandy	.12	T.	.65	.60	.58	.65			.02		.10	T		.46	T.	.12		.22		T.	.15	1.10			.10			.16	.35			5.38

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for January, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	38	40	47	49	57	52	37	42	45	38	32	19	37	47	14	22	21	28	24	36	50	54	32	38	35	24	38	38	48	48	11	38.4
	Minimum	15	30	25	31	32	24	22	21	33	32	9	0	11	12	2	11	11	20	11	10	27	19	10	25	20	12	11	30	25	32	25	19.3
Brandywine	Maximum	50	54	58	53	57	51	55	52	55	57	46	26	31	42	24	31	38	45	38	49	42	52	38	47	46	37	40	52	55	55	59	46.3
	Minimum	16	27	25	27	35	27	26	25	26	28	15	7	20	22	12	15	13	25	20	16	25	32	14	25	27	16	16	30	25	42	25	22.7
Burlington	Maximum	50	50	56	47	54	49	54	54	52	54	32	27	32	38	20	25	35	40	34	45	38	56	37	39	40	34	28	39	35	51	55	41.9
	Minimum	15	28	23	27	35	26	24	25	28	30	15	9	24	10	5	13	s	19	16	10	30	28	16	20	27	12	15	22	24	29	26	20.6
Martinsburg§	Maximum	48	51	46	41	46	45	56	51	54	60	25	26	40	39	19	30	39	42	34	47	55	53	35	37	40	35	31	50	44	49	49	42.5
	Minimum	19	26	30	30	30	35	27	27	27	35	21	12	12	26	13	13	17	23	27	19	24	31	19	19	25	21	16	18	20	30	29	23.3
Moorfield	Maximum	52	60	59	54	58	57	60	60	56	61	46	32	36	34	25	31	45	44	41	53	45	57	42	43	43	40	35	57	49	58	64	48.3
	Minimum	16	26	23	27	35	34	27	22	31	34	18	9	24	24	12	14	5	28	25	15	28	32	17	25	28	20	17	18	24	33	26	23.1
Piedmont	Maximum	46	47	56	46	56	50	52	51	49	51	39	24	32	37	18	33	34	37	33	44	39	57	37	39	37	33	28	47	41	50	53	41.8
	Minimum	18	37	26	30	36	32	25	28	28	32	13	9	23	16	7	13	19	26	20	11	30	36	15	21	26	17	14	24	26	35	27	23.2
Romney	Maximum	37	50	56	57	43	55	58	59	57	58	24	33	37	26	28	46	.	46	47	48	44	59	50	35	40	35	33	51	50	58	59	46.0
	Minimum	11	35	24	30	36	33	24	28	32	15	10	22	24	s	11	25	..	25	22	13	30	33	15	20	25	16	8	23	25	29	25	22.6
Upper Tract	Maximum	..	50	55	54	60	60	60	55	55	50	45	40	25	32	31	27	33	35	35	41	40	38	35	40	38	30	35	46	50	55	..	43.1
	Minimum	..	32	26	26	30	30	30	28	22	40	20	15	10	22	11	14	12	30	25	18	20	28	30	15	21	30	15	27	27	27	..	23.5
Northern Division.																																	
Bens Run	Maximum	41	46	54	47	61	44	49	57	50	48	32	28	34	33	18	27	24	32	32	40	55	52	41	37	34	34	50	52	57	52	71	43.0
	Minimum	20	30	28	26	38	32	33	25	35	30	14	9	23	7	3	15	7	21	9	9	25	23	19	29	14	20	18	33	31	32	30	22.2
Buckhannon	Maximum	41	45	56	53	65	50	48	48	50	50	38	24	42	50	20	21	26	32	30	39	52	57	30	44	30	31	35	46	55	54	70	43.0
	Minimum	16	35	28	27	46	32	29	24	29	38	12	2	20	16	5	13	6	18	18	10	30	27	20	28	27	23	27	28	30	43	33	23.9
Creston	Maximum	..	..	..	..	..	..	60	50	52	49	38	27	42	35	18	27	27	33	33	43	51	53	43	39	37	36	49	48	62	59	74	43.4
	Minimum	..	..	..	..	..	..	28	22	30	31	15	3	23	12	− 2	17	− 1	24	9	5	23	28	18	22	26	18	17	34	30	38	29	20.0
Elkins	Maximum	44	47	55	47	60	41	48	51	50	48	27	25	48	48	23	25	35	34	28	40	60	56	44	46	34	30	43	49	55	54	70	44.0
	Minimum	15	26	26	25	34	28	27	22	38	27	8	3	25	5	5	17	13	27	11	11	30	23	16	31	21	15	14	28	27	29	28	21.1
Fairmont§	Maximum	41	50	55	57	66	45	51	57	50	50	20	34	42	21	19	26	29	31	31	44	57	44	44	38	36	32	49	52	52	52	72	43.5
	Minimum	18	34	37	26	28	30	31	25	27	36	16	5	5	18	5	11	5	5	16	8	24	32	19	20	28	14	14	19	28	37	30	21.0
Glenville	Maximum	45	52	61	54	66	60	54	56	54	51	44	29	36	50	23	26	29	33	35	44	54	60	47	42	39	36	51	60	61	60	76	48.0
	Minimum	15	24	25	28	44	34	26	21	30	30	16	2	21	13	2	18	− 1	25	18	16	23	29	17	24	28	18	12	35	29	37	28	22.2
Grafton	Maximum	65	46	54	51	49	45	52	51	51	49	38	26	47	42	20	21	27	32	32	41	53	54	40	40	38	28	45	48	..	..	68	43.2
	Minimum	36	40	43	46	42	27	27	21	28	27	15	1	24	15	12	18	2	25	20	3	23	28	18	23	28	14	10	33	..	..	27	23.3
Lost Creek	Maximum	42	49	58	54	67	53	53	53	51	50	39	25	35	49	17	24	25	32	30	41	54	55	44	40	37	32	51	55	56	55	71	45.1
	Minimum	12	34	24	24	43	31	28	30	32	37	9	− 2	19	12	− 2	16	− 3	23	13	1	22	27	15	21	26	13	11	32	26	43	27	21.8
Mannington	Maximum	41	48	55	45	65	57	50	50	50	49	35	22	35	39	17	25	23	31	30	43	52	58	40	37	35	31	47	49	51	50	71	42.9
	Minimum	15	36	26	24	39	30	29	21	28	33	14	1	21	12	− 1	16	− 3	22	13	1	21	27	17	21	27	11	8	33	27	39	27	20.5
Morgantown	Maximum	40	45	53	49	65	55	48	47	48	47	32	22	38	48	16	24	22	29	29	40	52	52	38	36	34	29	48	48	61	51	69	42.4
	Minimum	20	34	35	25	45	28	34	24	40	30	12	2	20	12	3	15	8	20	14	16	26	25	19	27	26	17	9	32	38	36	33	23.4
New Cumberland	Maximum	38	45	44	48	45	43	47	47	44	43	23	21	33	33	14	26	24	28	27	34	37	37	29	39	31	26	41	41	48	48	60	37.0
	Minimum	19	24	25	21	24	22	30	19	33	23	8	0	14	5	− 9	11	5	20	12	..	..	..	..	..	.	16	..	..	..	..	24	16.5
New Martinsville	Maximum	41	46	56	41	61	45	49	50	50	47	36	25	35	35	18	25	24	32	35	42	48	50	40	37	33	33	48	50	51	48	70	42.0
	Minimum	19	29	30	27	40	30	32	24	35	32	15	6	20	9	− 1	16	3	20	15	6	19	26	18	22	26	20	15	32	29	38	29	22.0
Parkersburg	Maximum	43	43	53	47	60	43	49	50	51	48	27	26	34	33	19	24	24	33	28	42	55	55	39	38	34	33	50	52	60	49	72	42.4
	Minimum	24	29	31	29	38	31	32	27	42	27	14	10	26	s	5	12	4	24	12	12	26	25	22	25	26	20	21	37	39	35	34	24.1
Parsons	Maximum	42	46	55	44	43	49	50	59	51	36	25	41	52	22	26	25	26	33	29	39	47	55	56	40	35	30	45	46	59	55	71	43.0
	Minimum	11	29	23	26	30	23	21	26	36	12	− 1	20	11	11	20	19	11	25	27	5	26	24	15	18	23	12	9	32	24	28	25	20.0
Philippi	Maximum	42	50	52	54	60	56	56	55	42	50	39	35	39	34	20	22	24	32	32	40	55	54	48	39	33	31	42	52	55	40	73	45.7
	Minimum	19	38	32	26	45	30	32	32	34	33	11	4	5	3	− 1	12	3	20	10	10	31	22	14	28	7	11	9	28	38	31	26	20.7
Pickens	Maximum	40	51	57	52	58	45	50	52	45	47	32	32	14	45	29	26	32	32	35	32	55	57	48	48	36	36	41	46	51	53	63	44.2
	Minimum	18	19	19	31	38	29	30	22	28	32	6	− 7	16	5	1	17	13	23	15	12	30	25	15	23	20	15	13	32	32	33	30	20.5
Terra Alta	Maximum	36	40	47	49	57	36	45	43	44	44	28	20	38	45	15	21	19	37	24	35	52	54	38	35	32	25	40	41	47	48	66	38.7
	Minimum	22	30	29	30	32	24	27	20	34	27	6	0	12	7	− 1	11	10	19	11	6	28	20	11	26	20	15	8	30	28	33	29	19.5
Wellsburg	Maximum	35	38	46	46	47	42	42	44	46	20	20	34	32	16	22	23	29	33	34	43	51	31	35	33	24	45	40	48	48	58	37.2
	Minimum	19	30	30	28	33	26	33	22	23	20	9	6	19	s	0	7	6	14	12	10	23	21	23	23	24	12	10	33	32	32	31	19.9
Weston	Maximum	45	48	58	50	67	52	51	51	52	50	40	24	36	51	18	28	32	32	33	43	52	58	43	41	40	33	47	50	56	56	72	45.5
	Minimum	18	35	28	27	33	32	31	30	37	35	15	4	22	12	5	16	3	24	18	10	25	28	21	21	28	22	18	32	30	43	31	23.7
Wheeling§	Maximum	38	49	47	51	60	47	50	50	47	46	41	31	34	20	18	29	27	30	30	44	55	40	39	39	33	29	36	41	51	49	61	40.7
	Minimum	11	30	30	29	29	28	28	24	26	38	41	s	8	11	− 2	8	4	8	13	13	21	28	23	21	23	19	15	21	30	35	28	20.9
Southern Division.																																	
Beckley	Maximum	55	56	67	68	68	71	57	..	.	.	.	.	.	.	.	.	.	.	.	.	.	62	58	57	61	50	54	61	71	61	70	61.6
	Minimum	29	30	30	31	30	31	42	..	.	.	.	.	.	.	.	.	.	.	.	.	.	21	24	26	29	22	26	39	36	46	36	31.1
Bluefield	Maximum	59	58	58	55	59	51	47	52	52	51	42	28	37	40	47	31	35	43	46	36	44	44	50	47	44	41	47	51	59	62	68	47.9
	Minimum	21	34	39	39	51	30	35	31	42	40	12	5	22	20	15	23	23	34	22	28	33	31	20	34	27	23	30	32	36	46	41	29.6
Charleston	Maximum	55	53	64	62	66	62	59	57	55	55	53	53	51	50	49	49	49	46	49	48	63	60	61	59	57	57	55	59	57	65	77	56.6
	Minimum	14	29	29	30	34	35	30	27	26	38	20	7	10	9	10	10	10	12	20	20	28	31	22	22	30	26	25	28	39	42	32	24.1
Elkhorn	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Green Sulphur Spgs.	Maximum	42	41	39	41	54	56	47	38	35	42	44	29	36	47	25	30	36	42	38	40	40	53	45	50	47	41	47	57	65	66	70	44.4
	Minimum	30	29	21	22	36	45	27	16	14	19	16	3	18	17	12	11	14	18	16	20	22	23	15	27	28	15	20	25	32	35	30	21.8
Hinton§	Maximum	48	60	58	47	56	45	50	52	55	55	28	28	40	27	28	33	41	42	37	47	54	50	44	48	37	43	46	55	63	57	65	46.4
	Minimum	15	16	29	31	32	33	26	25	25	32	27	6	10	24	15	22	25	25	24	23	29	35	20	20	24	26	25	28	24	28	31	24.1
Holcomb§	Maximum	44	53	57	60	52	50	51	45	55	46	25	32	47	40	29	28	38	34	34	34	58	44	47	51	33	34	40	58	54	55	70	45.1
	Minimum	28	26	19	27	31	30	26	20	22	28	19	2	5	8	14	16	15	16	15	15	17	26	18	18	24	17	18	26	30	38	30	20.6
Huntington§	Maximum	46	54	58	62	60	44	52	51	55	50	20	35	31	16	18	26	33	34	30	42	57	40	39	38	37	37	49	55	65	50	73	43.9
	Minimum	18	30	31	32	36	33	32	28	29	40	18	10	10	9	9	12	10	10	18	17	28	32	22	21	21	27	27	29	36	45	34	24.3
Lewisburg	Maximum	43	49	55	52	56	53	49	50	52	54	43	26	28	41	22	35	34	39	36	38	38	51	42	45	43	37	43	53	61	59	67	44.9
	Minimum	15	33	29	28	38	29	23	23	30	34	13	5	20	18	3	20	21	31	20	18	27	31	16	28	29	19	21	33	30	37	30	24.3
Madison§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Marlinton	Maximum	42	46	50	38	50	44	47	44	46	48	36	22	30	34	22	22	32	36	32	36	32	46	34	42	38	30	36	46	52	48	56	39.3
	Minimum	10	20	24	22	34	34	20	18	24	26	10	2	18	16	2	14	s	30	11	12	22	24	12	22	24	14	16	28	26	32	24	19.4
Point Pleasant	Maximum	45	48	59	51	61	46	55	54	56	49	37	26	34	34	16	27	27	33	34	45	51	54	41	37	39	36	50	58	63	58	73	45.1
	Minimum	18	28	26	25	42	30	32	25	40	34	13	8	22	3	− 5	13	− 1	22	7	6	21	26	17	22	22	22	21	33	36	38	27	21.7
Powellton	Maximum	.	.	.	.	.	41	53	50	56	56	44	30	40	42	31	27	33	41	42	45	66	70	47	47	45	39	52	54	64	65	75	48.3
	Minimum	.	.	.	.	.	33	32	27	35	40	16	6	29	16	13	20	20	30	25	24	35	30	23	30	31	25	26	30	38	35	40	27.2
Robertsburg§	Maximum	47	53	59	64	60	46	54	56	54	50	22	34	34	20	18	25	33	34	33	43	58	44	42	38	38	36	52	59	65	52	74	45.1
	Minimum	12	24	25	26	32	32	29	24	26	34	22	10	10	11	.	.	.	5	9	7	24	34	20	20	27	27	24	28	32	41	30	23.0
Ryan	Maximum	45	50	60	55	62	50	53	52	55	50	40	29	34	34	17	27	28	29	27	32	40	57	46	40	36	37	59	50	53	53	76	44.1
	Minimum	15	21	33	24	47	32	25	20	29	28	16	0	22	6	− 1	16	− 5	15	5	5	20	28	17	23	20	16	18	35	30	36	28	20.1
Spencer§	Maximum	44	56	61	63	66	58	60	57	60	56	50	47	44	34	29	32	38	45	54	62	54	47	50	67	66	68	65	37	59	66	54	53.2
	Minimum	14	28	26	19	33	27	21	30	26	27	15	0	22	11	18	− 4	25	7	28	35	34	16	18	22	37	34	37	28	− 2	16	14	21.4
Union§	Maximum	68	59	62	66	67	66	62	66	60	51	24	30	19	26	29	43	41	39	40	42	39	38	55	46	41	45	47	58	65	66	..	49.7
	Minimum	32	26	31	28	28	22	28	32	40	28	21	2	7	13	14	15	21	19	19	20	21	19	18	22	23	19	22	30	31	35	32	23.2
White Sulphur Spgs.	Maximum	45	53	60	49	60	53	54	53	55	56	46	28	33	39	46	35	38	42	39	42	52	19	39	47	44	41	43	50	61	62	69	48.2
	Minimum	20	28	28	25	39	30	20	20	28	29	15	4	23	10	10	22	24	31	24	17	26	32	32	27	30	16	20	24	34	34	29	24.2
Williamson§	Maximum	48	55	62	65	63	48	55	56	58	58	25	36	40	22	22	25	35	37	40	40	65	50	48	46	38	45	51	60	66	60	74	48.2
	Minimum	20	29	29	35	40	35	30	30	30	41	25	10	12	12	12	16	19	20	25	25	32	39	25	25	32	27	30	31	39	39	36	27.4

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

F

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

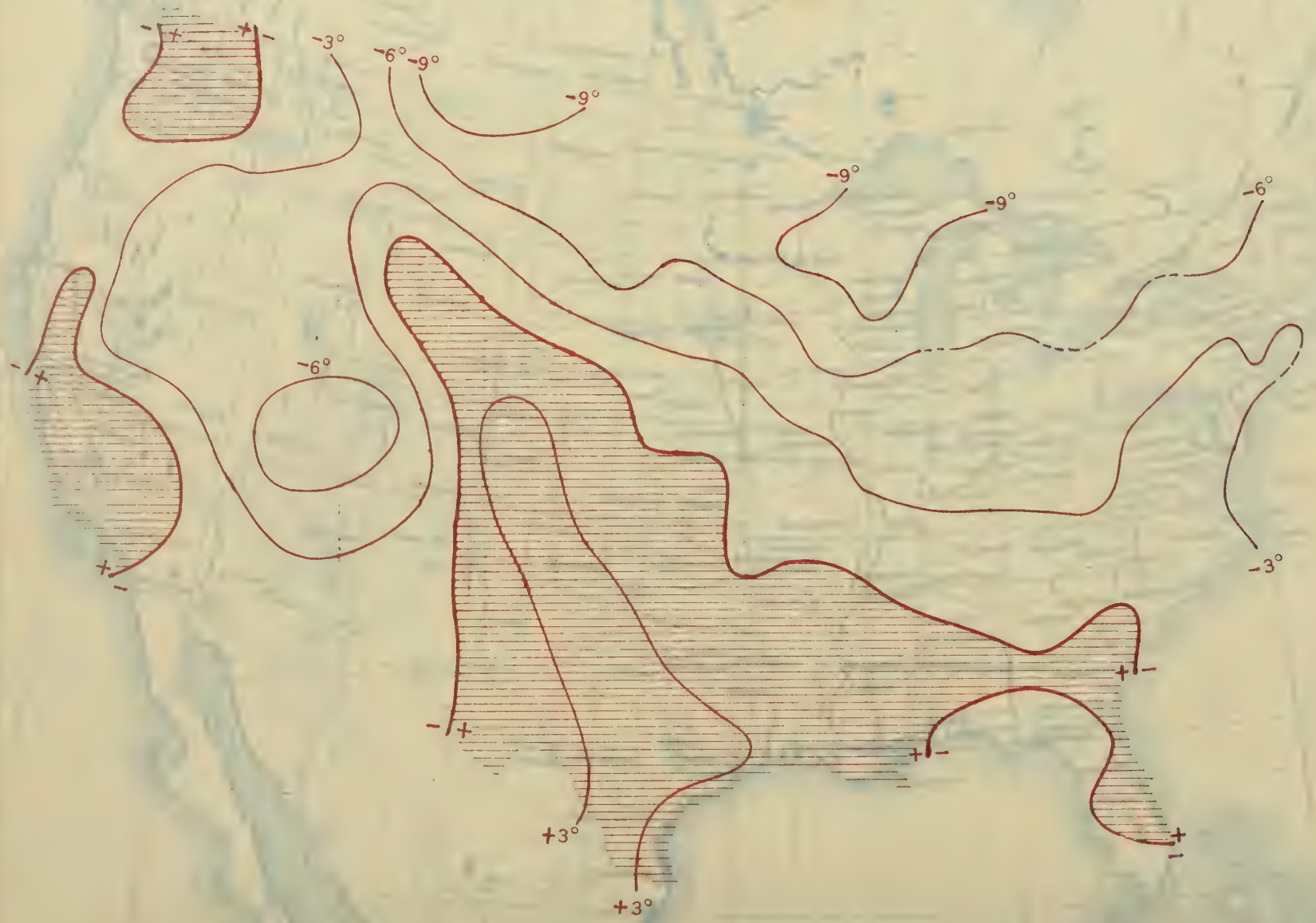
WEST VIRGINIA SECTION

FEBRUARY, 1917

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MARCH 20, 1917

Departure of the Mean Temperature from the Normal, February, 1917.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXV. PARKERSBURG, W. VA., FEBRUARY, 1917. No. 2.

GENERAL SUMMARY.

February was exceptionally dry until the 27th, with an average temperature somewhat below the normal. For the entire month, owing to heavy snow or rain on the last two days, both the precipitation and snowfall averages were slightly above the normal. The conditions were unfavorable for winter grains and peach orchards, owing to lack of snow cover during the cold period of the month, or from the 2d to the 15th, and to alternating periods of freezing and thawing weather during the last fifteen days. At the close of the month, however, the prospect for apples was good and the condition of meadows and pastures generally good. The rivers were at low or moderate stages.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.09 and 30.08 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.79 inches on the 12th, and 29.29 inches on the 4th. Elkins, 30.70 inches on the 12th, and 29.28 inches on the 4th.

TEMPERATURE.

The monthly mean for the State, 52 stations reporting, was 31.0°. The mean departure from the normal for 44 stations having ten or more years of record was —0.9°. Following a short period of warm weather at the close of January, the first half of February was abnormally cold, except the 1st and 7-8th, with the lowest temperatures occurring on the 4-5th and 12-13th, when the morning readings ranged generally from about zero to 10 below zero. After the 17th the temperature was continuously above the normal, with the highest readings occurring generally on the 26th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 79 per cent; 8 p. m., 70 per cent. The February averages for the same hours for the past 28 years are 83 and 76 per cent, respectively. Elkins, 8 a. m., 79 per cent; 8 p. m., 72 per cent. The February averages for Elkins for the same hours for the past 16 years are 84 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 67 stations reporting, was 3.29 inches. The departure from the normal for 47 stations having ten or more years of record was +0.14 inch. Light snow or rain was quite general on the 1st-2d, 4-5th, and 9-11th, and moderate snow or rain on the 14-15th. Moderate rain fell on the 19-20th and 23d-24th and heavy snow or rain on the 27-28th. Over the northern and central portions of the State the snowfall for the last two days ranged generally from 6 to more than 12 inches, the falls being heaviest over the Monongahela basin and eastern panhandle counties.

WIND.

The average wind velocity at Parkersburg was 8.4 miles per hour, or 1.1 miles above the February average for the past 27 years. The average at Elkins was 6.1 miles per hour, or 0.6 mile above the February average for 15 years. The highest velocity at Parkersburg was 43 miles per hour from the northwest on the 4th, and at Elkins 30 miles per hour from the west on the 4th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 43 per cent of the possible amount, or 5 per cent above the February average for 19 years. The average at Elkins was 35 per cent, or 2 per cent above the February average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bayard, 1st, 18th, and 19th; Brandywine, 19th; Charleston, 18th, 19th, and 21st; Davis, 1st and 19th; Green Sulphur Springs, 15th, 18th, and 27th; Hinton, 21st; Marlinton, 18th, 19th, and 23d; Pickens, 14th, 24th, 27th, and 28th; Romney, 20th and 24th; Rowlesburg, 19th and 21st; Terra Alta, 1st, 18th, and 27th.

Hail: Robertsburg and Ryan, 23d; Glenville, 24th.

Haze: Bayard, 20th and 21st.

Sleet: Terra Alta, 1st; Marlinton, 23d; Brandywine, Clay, Elkins, and Marlinton, 28th.

Thunderstorms (dates and number of stations reporting): 1st, 7; 19th, 2; 23d, 19; 24th, 14; 26th, 11; 27th, 7; 28th, 2.

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches.)	Clear.	Partly cloudy.	Cloudy.
1891	38.1	..	....	5.39	....	....	....	..	..	..
1892	37.1	72	—12	2.30	....	....	....	..	..	..
1893	35.0	71	— 6	4.81	6.70	1.65	....	..	..	..
1894	33.4	74	— 5	3.99	7.48	2.05	....	9	7	12
1895	22.8	79	—17	1.27	2.44	0.61	....	10	9	9
1896	33.4	62	— 5	3.31	6.23	1.50	....	7	8	14
1897	36.8	70	3	5.95	8.16	3.00	....	7	7	14
1898	32.7	74	—13	1.84	3.38	0.64	....	10	8	10
1899	26.1	69	—35	4.32	6.43	2.25	19.0	7	5	16
1900	30.7	83	—11	8.94	5.62	2.31	10.1	5	10	13
1901	27.1	62	— 6	0.86	1.66	0.10	4.1	8	8	12
1902	26.7	68	—14	3.20	5.65	1.33	8.1	6	7	15
1903	35.3	74	—19	5.99	9.59	2.58	8.6	10	6	12
1904	29.3	80	—13	2.37	4.55	0.52	8.1	12	9	8
1905	25.6	56	22	2.34	4.65	0.80	8.1	8	6	14
1906	32.4	79	—11	1.60	3.34	0.46	8.1	15	6	7
1907	31.1	68	—23	2.55	4.83	0.67	11.1	9	8	11
1908	30.9	72	—10	3.72	6.26	1.77	15.8	7	8	14
1909	40.4	80	— 5	4.16	7.68	1.44	3.4	7	8	13
1910	31.5	72	—11	3.18	6.56	0.98	13.5	9	8	11
1911	38.7	76	— 6	2.03	3.92	0.40	4.8	8	8	12
1912	27.3	70	—17	2.45	5.08	0.72	6.4	10	8	11
1913	32.6	80	— 4	2.27	6.15	0.21	4.7	13	6	9
1914	28.4	70	—22	3.64	6.96	1.63	19.7	9	7	12
1915	38.4	72	2	3.07	6.33	0.90	3.6	10	5	13
1916	31.4	72	—12	4.30	9.19	1.79	13.2	8	6	15
1917	31.0	80	—14	3.29	7.73	1.26	10.1	9	7	12
Means and Extremes..	32.0	83	—35	3.26	9.59	0.10	9.5	9	7	12

Climatological Data for February, 1917.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	26.1	−1.2	64	26	−11	5	43	2.95	−0.5.	1.03	28.5	14	6	4	18	w.	G. C. Dixon.
Brandywine	Pendleton		0	32.6	.....	69	26	− 5	5	45	2.50	.....	0.93	9.0	8	16	3	9	s.	Elmer Keister.
Burlington	Mineral	875	22	30.4	+0.4	72	26	− 5	13	39	2.35	0.06	0.90	12.0	5	10	12	6	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27	.....	.....	.....	.....	.....	.....	.....	1.83	−0.79	0.81	7.2	5	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	24	29.8	0	68	26	1	13	45	2.13	−0.35	0.75	6.9	6	18	3	7	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	35.4[b]	+4.0	75[b]	25	− 4[b]	13	50[b]	2.25	−0.25	1.25	.....	7	17[t]	2[d]	5[d]	.....	M. S. Henkel.
Piedmont	Mineral	919	0	31.5	.....	74	26	5	5	41	2.46	.....	1.42	11.0	7	8	14	6	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	19	33.3[a]	+1.8	74[a]	26	− 6[a]	1	42[a]	2.44	+0.17	1.20	15.0	8	10	7	11	w.	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	32.8	+0.7	70	26	− 5	5	44	2.20	+0.48	1.10	6.5	4	15	9	4	s.	J. M. Mallow.
Averages and	Extremes	.....	.....	31.5	+1.0	75	25	−14	5	50	2.35	−0.01	1.40	12.0	7	13	7	8	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	31.2	−0.1	69	26	− 6	5	43	2.56	−0.76	0.82	21.0	8	15	6	7	.....	J. D. Riggs.
Brandonville	Preston	1,809	6	.....	.....	.....	.....	.....	.....	.....	2.31	.....	0.53	.....	5	.....	.....	.....	.....	W. T. Miller.
Buckhannon	Upshur	1,411	20	30.6	0.6	73	26	6	5	42	4.51	+0.67	1.95	14.0	9	13	3	12	.....	H. A. Darnall.
Cairo	Ritchie	674	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Van A. Zevely.
Central Station	Doddridge	950	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. H. Doak.
Cheat Bridge	Randolph	3,600	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Walter Cole.
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	3.39	.....	0.80	19.0	8	.....	.....	.....	.....	Samuel Harmon
Creston [f]	Wirt	701	15	32.0	−0.2	76	26	− 5	5	41	2.92	+0.63	1.07	10.5	12	6	2	20	sw.	J. M. Reed.
Davis	Tucker	3,093	8	.....	.....	.....	.....	.....	.....	.....	4.03	.....	0.65	19.0	16	7	6	15	sw.	Ross C. Male.
Elizabeth	Wirt	646	5	.....	.....	.....	.....	.....	.....	.....	2.36	.....	0.80	.....	9	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,940	16	28.9	2.6	72	26	−10	5	48	3.79	+0.62	1.20	14.1	14	3	8	17	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	28.8	−3.7	71	26	6	5[t]	42	2.31	−0.70	0.80	9.0	8	14	1	13	w.	F. P. Hall.
Glenville	Gilmer	738	23	33.6	+1.4	76	26	− 5	5	44	3.01	−0.78	1.30	13.0	12	6	10	12	w.	M. T. Brannon.
Gratton	Taylor	1,000	24	30.0	−1.4	66	1	− 6	5	39	3.37	+0.02	1.80	10.0	5	12	1	15	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	30.8	+0.3	71	26[r]	− 7	5[t]	42	3.10	+0.16	1.30	11.0	8	10	7	11	w.	Allen Smith.
Mannington	Marion	974	14	30.6	+0.1	70	26	6	5	47	2.34	0.30	0.79	11.7	15	9	5	14	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	30.5	−0.8	69	26	8	5	39	1.97	−1.24	0.63	16.0	11	9	6	13	s.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	14	31.4	−0.1	70	1	7	13	44	.....	.....	.....	.....	.....	13[a]	3[a]	1[a]	sw.	M. Z. White.
New Cumberland	Hancock	987	19	26.1	1.2	62	26	−10	13	39	1.26	−1.26	0.39	6.2	8	2	21	5	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	32.2	+0.2	68	1[t]	− 6	5	43	2.78	−0.26	0.75	.....	8	9	5	16	s	Wm. Ankrom.
Parkersburg	Wood	638	28	30.8	−3.0	72	26	− 6	5	41	2.44	−0.80	1.03	12.1	10	6	11	11	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	29.7	+0.4	72	26	− 8	5	39	3.77	+0.32	1.18	17.0	7	6	11	11	.....	J. W. Swisher.
Philippi	Barbour	1,149	20	27.6	−3.8	80	26	−11	5	50	3.69	−0.32	1.20	18.0	7	4	22	2	w.	Okey J. Robinson.
Pickens	Randolph	2,697	14	29.3[b]	−2.4	69[b]	26	−12[b]	5[t]	50[b]	7.73	+2.71	1.92	24.0	17	7	11	10	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30	.....	.....	.....	.....	.....	.....	.....	3.29	−0.09	0.98	.....	12	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	8	.....	.....	.....	.....	.....	.....	.....	1.93	.....	0.60	7.0	9	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	11	28.2	−2.7	70	26	7	5	44	3.35	−0.28	0.81	19.0	14	20	3	5	nw.	G. M. Whisler.
Terra Alta	Preston	2,612	16	26.2	1.5	65	26	14	5	41	3.10	+0.92	1.30	23.0	15	13	7	8	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	26.8	−0.3	65	1	− 6	13	48	1.29	1.78	0.40	6.0	7	3	16	9	w	C. P. Waugh.
Weston	Lewis	1,026	21	32.6	+1.2	75	26	− 5	5	40	3.05	−0.76	1.95	6.0	7	8	7	13	.....	Weston State Hospital.
Wheeling	Ohio	645	30	27.6	.....	68	26	− 7	5[t]	45	1.75	−0.84	0.69	3.6	12	13	7	8	s.	Miss M. B. Forsyth.
Averages and	Extremes	.....	.....	29.8	1.0	80	26	−14	5	50	3.01	0.27	1.95	13.5	10	9	8	11	w.	
Southern Division.																				
Bancroft	Putnam	574	12	30.7	−2.7	77	26	− 5	5[t]	49	3.72	+0.68	1.43	9.0	9	16	0	12	s.	B. E. Ivent
Beckley	Raleigh	2,440	16	32.4	−0.6	75	26[t]	− 5	5	40	3.24	+0.08	1.25	6.0	7	7	4	17	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	33.6	0	70	26	− 8	5	40	1.65	−1.48	0.75	4.5	4	12	3	13	.....	Norfolk & Western Ry
Charleston	Kanawha	597	13	38.8	+0.4	78	26	2	5	59	5.20	+1.69	1.60	3.6	12	11	0	17	sw.	G. V. Lewis.
Clay	Clay	706	0	28.9[a]	.....	75[a]	26	3	6	49[a]	3.98	.....	1.65	2.0	6	10	5	15	.....	Prof. E. H. Knabenshue
Cuba	Jackson	650	14	31.2	−1.0	75	26	− 6	5	40	2.65	0.40	1.05	9.0	8	8	12	8	nw.	C. T. Perry.
Dam 19 O. R.		557	0	.....	.....	.....	.....	.....	.....	.....	1.90	.....	0.82	4.5	11	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	1	.....	.....	.....	.....	.....	.....	.....	3.36	.....	1.35	8.5	11	.....	.....	.....	w.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0	.....	.....	.....	.....	.....	.....	.....	2.97	.....	0.87	10.0	10	.....	.....	.....	sw.	U. S. Engineer Office.
Dunlow	Wayne	703	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James W. Damron.
Elkhorn	McDowell	1,933	23	35.8	0	68	26[t]	− 5	5	34	4.27	+1.13	1.01	5.5	9	3	13	12	w.	J. J. Lincoln.
Evans	Jackson	606	0	32.8	.....	68	26	2	5	38	3.39	.....	1.10	14.8	11	6	2	20	.....	B. F. Sayre.
Green Sulphur Spgs	Summers	1,600	20	31.8	0.4	76	26	− 7	5	43	5.20	+2.64	1.60	5.0	13	13	0	15	n.	W. H. Gwinn.
Hinton	do	1,450	19	30.4	−3.9	74	26	− 4	5	47	4.04	+0.91	1.32	3.5	12	9	1	18	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	4	28.3	.....	75	26	7	5[t]	47	4.73	.....	.....	9.0	11	6	8	14	.....	R. C. Ferguson.
Huntington	Cabell	538	20	31.2	−1.0	75	26	4	5[t]	45	3.88	−0.77	1.18	10.9	11	11	2	15	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	0	.....	.....	.....	.....	.....	.....	.....	1.75	.....	1.31	.....	15	.....	.....	.....	.....	Cabin Creek Con. Coal Co
Lanes Bottom	Webster	2,062	0	.....	.....	.....	.....	.....	.....	.....	4.78	.....	1.30	3.6	7	6	0	22	s.	C. A. Broddy.
Lewisburg	Greenbrier	2,200	16	32.2	+0.4	72	26	− 9	5	38	4.07	1.16	1.10	2.0	6	5	5	18	nw.	Geo. T. Argabate.
Logan	Logan	687	13	.....	.....	.....	.....	.....	.....	.....	1.63	.....	1.80	.....	7	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	27.1	−2.2	66	26	−10	3[t]	42	3.62	+0.19	1.10	6.0	8	3	15	10	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Fully.
Point Pleasant	Mason	553	25	32.0	1.2	75	26	− 8	5	42	3.62	+0.03	1.10	11.0	13	5	4	19	nw.	W. D. Holmes.
Powellton	Fayette	933	20	33.4	+0.1	76	26	− 2	5	42	5.05	+2.08	1.20	.....	8	10	9	9	.....	S. C. Lampert.
Rainelle	Kanawha	2,425	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Guthrie.
Raleigh	Beckley	2,130	0	.....	.....	.....	.....	.....	.....	.....	4.00	.....	1.63	.....	8	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	0	.....	.....	.....	.....	.....	.....	.....	3.34	.....	1.20	.....	7	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	16	30.3	−2.4	75	26	− 5	5	49	2.91	−0.30	0.84	8.5	10	3[a]	7[a]	17[a]	.....	E. C. Brace, Jr.
Ryan	Roane	709	13	31.0	2.1	76	26	6	5[t]	43	4.61	+1.16	1.51	15.0	12	5	9	14	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	0	.....	.....	.....	.....	.....	.....	.....	3.31	.....	1.76	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	12	31.50[e]	.....	73[e]	26	− 7	5	99[e]	1.95	−1.18	0.60	5.0	8	9[d]	4[d]	4[d]	.....	A. M. McKown.
Sutton	Braxton	839	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. B. Eakle.
Union	Monroe	2,250	12	29.4[a]	−3.8	72[a]	25	− 7	5	47[a]	5.10	+2.55	1.20	3.0	6	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	32.7	.....	73	26	− 6	5	44	3.85	.....	0.85	2.0	10	17	2	9	nw	J. M. Ayres.
Williamson	Mingo	660	16	33.7	2.4	78	26	0	5	48	4.75	+1.53	1.25	4.0	11	12	9	7	w.	J. F. Keyser.
Averages and	Extremes	.....	.....	32.0	−1.3	78	26	−10	3[t]	69	3.80	+0.74	1.80	6.6	9	9	5	14	w.	
State Averages and	Extremes	.....	.....	31.0	−0.9	80	26	−14	5	69	3.29	+0.14	1.95	10.2	9	9	7	12	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

[t] Also on other dates. [d] Received too late to be included in means and summaries.

[r] Approximated by the observer.

Daily Precipitation for February, 1917.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac	.33	.03	T.	.02	.08	.02			.03	.02				T.	.18	.03	T.		.04			T.	.42	.12			1.03	.54				2.95
Brandywine	do	T.	T.		.20					T.						.45				.10	.18			.50	.10			.04	.93				2.50
Burlington	do	T.			T.					T.						.45				.10				.65			.25		.90				2.35
Harpers Ferry	do																.59				.10		T.		.12			.21	.81				1.83
Martinsburg	do				.05											.39				.11	T.	T.		.50				.33	.75				2.13
Moorefield	do	.01														.50				.05	.06			.20				.18	1.25				2.25
Piedmont	do	.02	T.			T.				T.		T.				.28	T		T.	.03				.28	.21			.22	1.42				2.46
Romney	do	.09														.30			T.	.04		.09		.15	.20			.37	1.20				2.44
Upper Tract	do	T.			T.							T.			.30	.46				T.	T.				.40		T.		1.10				2.20
Northern Division.																																	
Bens Run	Ohio				.30					.13						.15				.04				.64	.15			.33	.82				2.56
Brandonville	Monongahela																		.50		.25			.53	.52			.51					2.31
Buckhannon	do	T.	.05		.05	.20				.10						.40				T.				.58	.58			.60	1.95				4.51
Cairo	Little Kanawha																																
Central Station	Middle Is. Creek																																
Cheat Bridge																																	
Cortland	Monongahela		.20			.30					.10						.50				.45				.65				.39	.80				3.39
Creston	Little Kanawha	.10	.05	.05		.10	T.	T.		.07	T.	.03			T.	.15	.30			.05					1.07			.55	.40				2.92
Davis	Monongahela	.13	.20	.10		.20	.10			.05	.15	.25			.15	T.	.20	.05			.40		.45		.50		.65		.45				4.03
Elizabeth	Little Kanawha			.06		.02				.10		.02					.26				.10				.80			.38	.62				2.36
Elkins ***	Monongahela	.10	.03		.22	T.	T.			.04	T.	.05	T.		.03	.40	T.		T.	.04	.02			.65	.44		.01	.76	1.00				3.79
Fairmont	do	.17	T.	.02	T.	.10	T	T.	T.	T.	T.	.03			T.	T.	.13	T.		T.	T.				.80			.30	.76				2.31
Glenville	Little Kanawha	.12	.06			.04				.05	.05	.03			T.	.50	.20			T.	.06			1.30				.28	.32				3.01
Grafton	Monongahela	T.	T.		T.					T.					T.	.36				T.				.53	.20			.48	1.80				3.37
Lost Creek	do	.04	T.	T.	.02	.05				T.		.06			T.	.16	T.			T.				.56				.81	1.30				3.10
Mannington	do	.07	.03	.04	.02	.13	.02			.03	T.	.02	T.			.10	.03			.04				.57	.17			.28	.79				2.34
Morgantown	do	T.	.02		T.	.02				.04		.02				.10	.02			.04				.48	.47			.13	.63				1.97
Moundsville	Ohio																																
New Cumberland	do	.05	.02		.25	T.	T.	T.		.15						.15	.10		T.	T.		T.		.39	.15			T.					1.26
New Martinsville	do	.05	T.	T.	T.	.15				.15					.40	T.								.70	.30			.28	.75				2.78
Parkersburg ***	Ohio	T.	T.		.14		.01		.03	.15	.02	T.		T.		.11	T.			.08				.75			T.	.15	1.00				2.44
Parsons	Monongahela	.10	T.	T.						.20						.30	.10			T.				.89				1.18	1.00				3.77
Philippi	do	.19			.20		.40																	.55	.15			1.09	1.20				3.69
Pickens	do	.30	.20	.10	.30	.10			T.	.30	.10	.30		.10	.20	.10			.84	1.49				.87	1.05			.37	1.01				7.73
Rowlesburg	do	.06	.05	.08	T.	.30				.05	.06	.05			T.		.28	.04							.98			.70	.64				3.29
Saint Marys	Ohio	.18	.03			.03	T.			.18		T.				T.	.18				.03				.60			.25	.45				1.93
Smithfield	Fishing Creek	.12	.20	.10		.18	T.			.30	.10	.10				T.	.24		.18	.09	.01				.81			.34	.58				3.35
Terra Alta	Monongahela	.10	.05		.10	.30				.09		.15			.05	.25	.05		.10	.10				.25	.20			.05	1.30				3.10
Wellsburg	Ohio	T.	T.		.05	.05				.20							.20							.29	.40		T.		.10				1.29
Weston	Monongahela	.10	.05												.05	.20								.70				.95	1.00				3.05
Wheeling	Ohio	.09	.01	.01		.10			T.	.14		.02					.02	.03	T.	T.	.01				.65			.02	.05				1.75
Southern Division.																																	
Bancroft	Great Kanawha	.05	T.			.10				.10						.10	.60			.15					1.43			.45	.74				3.72
Beckley	do		.20			.20				.20											.50				1.25			.32	.57				3.24
Bluefield	do					.30				.15															.75				.45				1.65
Charleston	do	.28	.33		T.	.30				.28	T.				.08	.30	.28			.15	.35				1.60			.35	.90				5.20
Clay	do	T.	.20				.18		T.		T.	T.				.40									1.65			.61	.94				3.98
Cuba	Sand Creek	T.	.05		T.					.05		T.				.40	T	T.		.20				.70	.55			.40	.50				2.65
Dam 19 O. R.	Ohio	.03	.01			.01				.05						.01	.07			.06	.06				.82			.15	.63				1.90
Dam 22 O. R.	do	.11				.01				.12	T.	.08				.15	.15			.12	.02			T.	1.35			.53	.72				3.36
Dam 26 O. R.	do	.20				.05				.05						.06	.28			.05	.06				.87			.49	.86				2.97
Dunlow	Big Sandy																																
Elkhorn	do	.56		.10	.30					.15						.68					.67	.32			1.01				.48				4.27
Evans	Ohio	.06	.02		.13						.10	.10				.45	T.			.04				.60	.24			.55	1.10				3.39
Green Sulphur Spgs.	Great Kanawha	.80	.20			.20			.20	.10						.75			.10	.20	.40			.60	1.00			.10	.55				5.20
Hinton	do	.76	.10	T.		.16				.06	T.					.56	.24			.04	.68	.06			1.32	.08		T	.18				4.04
Holcomb	do	*	.54		*	.20				.30						.65					.58			*	.92			*	1.54				4.73
Huntington	Ohio		.10			.22				T.	.04				.04	.40	.28			.06	.14				.90			.52	1.18				3.88
Gaylord	Great Kanawha	.43	.23	.03					.20		.09	.07				.24	.39			.10	.60	.09			1.31	.03		.13	.81				4.75
Hales Bottom	do		.20							.10						.56					.80			1.22				1.30	.60				4.78
Lewisburg	do	.83							T.							.59			T.	.45	.43			T.	1.10			T.	.67				4.07
Logan	Guyandotte	.09	T.							T.						.70	.13			.27					1.80			.04	.95				4.03
Madison	Great Kanawha																																
Marlinton	do	.40	T.		T.	T.	T.		T.	T.		T.				.66	T.		T.	.26	.36			.38	.40			.06	1.10				3.62
Muttallburg	do																																
Point Pleasant	Ohio	.17	.04	.04		.08				.14		.02				.25	.21			.08	.06				.95			.48	1.10				3.62
Powellton	Great Kanawha	.68							.05							.86				.15	.60			1.08				.45	1.20				5.05
Raleigh	do	.71	T.													.32	.17			.09	.81	T.			1.63			.06	.21				4.00
Renick	do															.04	.60		.20		.80	.20			1.20				.30				3.34
Robertsburg	do	.18	.05			.20				.10						.20	.20				.05				.84			.44	.65				2.91
Ivan	do	.16	.02		.22		T.			.16		.05				.53	T		.05	.23				.76	.62			.30	1.51				4.61
Sissonville	do	.30													.20	T.									*	1.76			.50	.55				3.31
Spencer	Little Kanawha	T.		.10		.25	.15		.05	T.						.30							T.	.40				.60	.10				1.95
Sutton	Great Kanawha																																
Union	do	1.00			.30													.75		.75				1.20				T.	1.10				5.10
White Sulphur Spgs.	do	.85				.20			T.							.30			.20	.20	.45			.65	.60			.10	.30				3.85
Williamson	Big Sandy	.69	.10			.30	T.			.20	.05					.60	.15			T	.88	.02			1.25				.51				4.75

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for February, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	53	19	4	35	29	14	38	40	35	14	15	5	31	33	32	31	48	46	50	51	50	47	47	47	50	64	62	35	..	..	..	36.6
	Minimum	18	−2	−10	2	14	−7	8	30	2	−3	0	−5	−8	23	26	18	24	36	31	37	24	27	27	33	23	39	34	26	..	..	..	15.6
Brandywine	Maximum	52	34	20	45	39	34	50	51	47	30	28	17	40	44	40	39	53	55	47	59	56	52	44	55	55	69	68	50	..	..	..	45.5
	Minimum	34	8	−3	11	−5	−4	18	28	14	5	17	−2	−5	25	20	23	18	31	29	36	21	28	26	39	24	40	48	31	..	..	..	19.8
Burlington	Maximum	47	26	16	44	22	28	49	52	39	26	25	16	34	44	34	40	56	57	42	59	54	50	44	50	48	72	62	40	..	..	..	42.0
	Minimum	23	8	2	8	−3	6	13	31	12	8	11	7	−5	13	25	27	19	30	33	23	26	28	20	30	24	34	38	32	..	..	..	18.7
Martinsburg§	Maximum	48	18	21	42	11	31	51	53	38	29	24	17	32	45	31	38	53	53	37	39	42	51	45	56	47	68	55	37	..	..	..	39.7
	Minimum	32	13	2	3	0	0	11	25	35	10	11	7	−1	0	20	24	23	24	35	32	28	29	26	34	30	31	42	32	..	..	..	19.9
Moorfield	Maximum	59	33	21	49	43	40	54	53	..	..	32	20	43	49	45	42	62	56	51	64	55	58	51	60	75	73	73	53	..	..	..	50.5
	Minimum	32	12	2	3	−1	2	13	28	..	..	18	5	−4	20	20	21	20	18	31	29	22	28	23	40	40	23	51	32	..	..	..	20.3
Piedmont	Maximum	47	30	14	43	34	24	45	51	44	25	24	17	33	41	37	36	57	49	47	57	45	49	43	51	52	74	67	47	..	..	..	42.2
	Minimum	29	10	−1	11	−5	3	17	35	12	5	9	3	0	24	27	25	21	33	35	31	27	31	23	37	29	33	45	32	..	..	..	20.8
Romney	Maximum	57	34	15	45	32	20	57	55	52	27	28	22	25	45	42	39	58	59	52	60	52	..	54	55	59	74	66	54	..	..	..	45.9
	Minimum	32	12	0	10	−2	4	15	40	17	7	12	5	−6	20	22	27	20	35	34	30	23	..	24	32	26	38	50	32	..	..	..	20.7
Upper Tract	Maximum	50	30	15	35	35	32	36	50	46	28	26	25	40	44	43	36	55	55	50	59	52	52	51	53	56	70	68	60	..	..	..	44.7
	Minimum	29	5	−2	14	−5	2	6	30	15	6	15	3	−4	24	25	25	24	36	34	38	22	28	25	40	23	42	50	31	..	..	..	20.8
Northern Division.																																	
Bens Run	Maximum	65	23	17	37	10	24	41	47	41	28	24	14	33	42	35	36	56	52	63	58	54	52	56	52	56	69	65	40	..	..	..	42.5
	Minimum	22	−3	−1	10	−6	4	18	30	9	5	6	−1	−2	29	25	19	30	36	35	31	27	30	28	35	24	44	38	32	..	..	..	19.8
Buckhannon	Maximum	65	32	17	35	15	19	42	45	39	23	23	15	35	35	40	35	52	48	52	51	52	52	52	53	57	73	66	56	..	..	..	42.1
	Minimum	25	4	−2	12	−6	2	9	28	10	5	7	2	2	20	25	24	20	40	30	40	23	32	27	29	25	31	40	32	..	..	..	19.1
Creston	Maximum	61	29	20	40	27	23	44	47	44	30	26	20	38	43	39	39	57	52	61	57	52	53	53	54	57	76	70	45	..	..	..	44.9
	Minimum	28	8	1	8	−5	4	14	28	14	7	1	−2	−3	30	26	9	19	38	34	37	22	27	25	36	22	38	41	32	..	..	..	19.2
Elkins	Maximum	58	15	19	29	0	25	44	45	37	22	22	12	39	39	35	34	56	48	57	57	54	53	52	50	60	72	58	37	..	..	..	40.7
	Minimum	15	−4	−6	−5	−10	0	11	35	4	2	6	−3	−9	28	24	24	28	36	32	28	23	27	27	31	26	46	33	30	..	..	..	17.1
Fairmont§	Maximum	35	15	27	38	7	31	40	47	18	26	21	19	34	43	30	34	58	40	62	55	50	53	52	52	59	71	47	42	..	..	..	39.5
	Minimum	35	10	−1	0	−6	−6	7	31	18	6	4	1	−2	1	26	16	20	31	34	35	26	27	27	36	26	29	42	32	..	..	..	18.0
Glenville	Maximum	72	29	18	42	38	27	47	49	46	28	25	22	40	42	40	38	62	56	66	66	58	58	58	55	62	76	72	47	..	..	..	47.8
	Minimum	28	8	0	14	−5	3	11	26	9	14	1	2	−2	30	28	13	19	40	31	38	21	22	21	37	23	40	42	32	..	..	..	19.5
Grafton	Maximum	66	29	12	33	33	22	41	41	40	22	22	16	34	38	38	34	50	50	57	57	51	50	54	54	56	65	65	43	..	..	..	41.9
	Minimum	28	7	1	12	−6	3	5	5	12	6	2	1	−3	28	25	12	16	36	29	34	23	29	23	38	23	40	41	33	..	..	..	18.0
Lost Creek	Maximum	66	27	14	39	17	21	43	47	41	24	22	16	35	41	38	35	58	50	63	58	52	53	54	54	60	71	71	43	..	..	..	43.3
	Minimum	26	5	−2	11	−7	3	8	30	10	5	3	−4	−7	28	25	19	19	38	30	36	21	27	21	37	19	43	41	32	..	..	..	18.2
Mannington	Maximum	68	38	16	38	32	21	40	46	43	24	21	15	33	43	40	35	56	55	58	58	49	50	53	53	53	70	69	43	..	..	..	43.6
	Minimum	27	8	−1	12	−6	3	7	27	11	5	0	−1	−5	26	24	2	9	36	33	33	23	30	24	34	23	38	38	31	..	..	..	17.5
Morgantown	Maximum	65	26	12	36	31	18	39	40	40	22	20	12	45	40	36	32	55	51	58	55	48	48	54	52	54	69	66	39	..	..	..	41.5
	Minimum	26	5	−4	10	−8	2	13	33	7	2	4	−2	6	27	21	18	23	33	32	40	23	31	34	33	24	49	35	29	..	..	..	19.5
New Cumberland	Maximum	57	18	16	29	14	22	35	39	38	21	18	10	26	39	34	31	40	52	50	54	42	43	50	48	50	62	59	43	..	..	..	37.1
	Minimum	18	5	−2	11	−8	3	15	32	8	0	0	−8	−10	15	16	12	20	13	17	30	17	25	30	30	24	50	31	28	..	..	..	15.1
New Martinsville	Maximum	68	28	16	36	18	40	42	48	44	25	22	15	34	44	40	36	58	53	62	62	53	52	52	50	55	68	65	54	..	..	..	44.3
	Minimum	25	7	0	12	−6	17	28	28	10	5	0	−1	−4	17	25	17	19	36	34	34	26	31	26	35	25	45	37	31	..	..	..	20.0
Parkersburg	Maximum	60	19	20	39	8	25	43	47	31	25	24	12	35	44	34	38	58	49	62	50	52	48	55	47	56	72	62	36	..	..	..	41.1
	Minimum	19	1	0	1	−6	5	25	31	9	7	6	−1	−1	32	22	21	27	35	35	32	27	32	35	32	27	51	36	32	..	..	..	20.4
Parsons	Maximum	59	23	11	40	31	20	41	45	38	22	21	11	35	39	35	32	54	49	54	55	51	50	51	51	58	72	65	40	..	..	..	41.2
	Minimum	23	3	−4	9	−8	0	2	31	7	3	5	−2	2	28	25	24	21	31	32	30	22	31	23	36	23	42	40	31	..	..	..	18.2
Philippi	Maximum	66	29	13	35	13	19	44	18	15	23	13	34	30	31	37	33	55	48	50	59	54	54	54	56	50	80	75	66	..	..	..	41.2
	Minimum	18	0	−7	7	−11	−3	8	4	0	0	−3	−9	−4	24	20	17	21	25	32	33	19	22	26	36	20	30	44	27	..	..	..	14.1
Pickens	Maximum	56	46	31	35	1	19	44	48	34	24	27	37	34	32	32	48	45	57	..	..	60	60	65	52	63	69	62	35	..	..	..	42.9
	Minimum	17	−4	−9	0	−12	−5	10	22	2	−1	−3	−12	14	22	20	25	35	33	..	..	25	28	38	30	22	43	33	29	..	..	..	15.7
Terra Alta	Maximum	55	18	6	33	27	14	36	40	35	16	15	7	29	31	33	26	48	49	50	52	49	47	48	49	52	65	62	35	..	..	..	36.7
	Minimum	18	2	−9	4	−14	−6	10	30	1	−3	−1	−6	0	23	22	17	22	35	31	35	23	26	32	32	21	40	34	26	..	..	..	15.8
Wellsburg	Maximum	65	18	12	30	8	18	35	41	38	18	18	8	27	35	30	29	50	48	55	52	42	44	48	48	45	62	56	38	..	..	..	36.4
	Minimum	17	3	0	8	0	2	13	31	7	1	2	0	−6	21	18	18	22	28	27	28	20	27	31	32	25	45	32	28	..	..	..	17.1
Weston	Maximum	68	28	14	40	18	22	44	46	42	24	25	16	37	40	39	35	56	55	61	58	50	50	55	56	57	75	72	44	..	..	..	43.8
	Minimum	28	6	1	12	−5	3	12	32	12	7	7	3	0	31	28	25	22	40	32	40	25	32	27	38	24	44	42	32	..	..	..	21.4
Wheeling§	Maximum	36	14	27	36	10	30	40	48	20	26	19	14	31	44	37	32	57	41	58	48	50	49	51	47	55	68	44	43	..	..	..	38.4
	Minimum	30	10	0	5	−7	−7	9	30	12	2	3	−3	−3	−1	25	17	23	32	32	33	25	24	28	33	25	28	35	30	..	..	..	16.8
Southern Division.																																	
Beckley	Maximum	16	15	17	45	13	28	46	55	27	27	25	19	42	49	40	41	54	52	55	67	58	65	61	64	62	75	75	42	..	..	..	44.1
	Minimum	3	3	−4	13	−5	2	17	22	12	2	16	2	2	31	32	18	27	36	37	41	27	31	29	42	26	41	42	34	..	..	..	20.7
Bluefield	Maximum	62	25	15	37	32	25	39	39	37	25	25	26	43	39	44	37	53	49	53	54	57	55	54	54	55	70	69	49	..	..	..	43.6
	Minimum	25	1	−7	13	−8	−1	19	33	10	4	21	4	5	33	32	21	33	35	35	40	32	34	43	44	27	45	49	35	..	..	..	23.5
Charleston	Maximum	72	68	49	42	39	41	41	58	57	55	53	50	51	50	55	53	53	60	60	62	61	62	59	57	64	78	72	69	..	..	..	56.8
	Minimum	32	9	0	3	−2	4	13	27	19	10	20	5	4	6	19	20	26	30	39	34	29	28	32	40	27	29	46	34	..	..	..	20.8
Elkhorn	Maximum	46	40	20	38	10	27	41	40	39	36	36	34	44	43	41	43	53	55	54	54	57	57	56	54	60	68	68	47	..	..	..	45.0
	Minimum	26	20	−4	10	−5	2	19	34	14	2	22	24	11	38	33	28	33	44	49	42	32	35	42	36	28	47	47	35	..	..	..	26.6
Green Sulphur Spgs.	Maximum	66	38	18	41	16	27	42	41	35	21	22	22	41	42	40	43	61	54	47	57	58	56	53	52	58	76	62	44	..	..	..	44.0
	Minimum	30	6	−5	10	−7	0	12	14	11	4	15	2	−2	28	30	26	23	38	34	38	23	23	28	41	22	36	38	34	..	..	..	19.7
Hinton§	Maximum	44	15	20	41	10	28	44	39	24	29	28	21	39	42	38	43	59	50	46	56	55	53	50	52	57	74	57	43	..	..	..	41.3
	Minimum	31	10	−2	−1	−4	−2	10	18	23	8	8	6	5	7	32	28	24	25	38	37	29	30	28	32	26	27	36	39	..	..	..	19.5
Holcomb§	Maximum	49	11	30	40	6	29	45	40	20	19	18	17	42	40	37	38	42	58	55	56	59	54	52	56	60	75	50	39	..	..	..	40.6
	Minimum	34	7	−5	0	−7	−7	5	19	19	2	3	−1	−5	0	9	24	24	25	24	33	25	26	26	38	23	32	47	27	..	..	..	16.0
Huntington§	Maximum	37	10	31	42	14	33	44	47	19	29	22	17	42	46	35	44	59	46	62	54	55	54	56	49	61	75	43	38	..	..	..	41.6
	Minimum	35	9	1	2	−4	−4	13	32	17	10	12	4	4	10	29	25	27	40	35	32	29	30	31	36	27	30	42	32	..	..	..	20.9
Lewisburg	Maximum	62	30	17	38	49	29	43	41	37	25	25	20	39	39	39	39	54	52	44	53	55	54	53	48	57	72	69	51	..	..	..	44.1
	Minimum	28	3	−6	11	−9	−2	12	27	11	2	16	1	−2	28	32	24	22	38	35	36	24	30	26	43	23	32	49	33	..	..	..	20.2
Madison§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Marlinton	Maximum	52	20	12	32	26	28	40	38	34	20	18	10	34	36	34	34	48	48	42	50	48	48	38	46	52	66	58	40	..	..	..	37.6
	Minimum	20	−2	−10	10	−10	−2	10	30	6	−1	10	0	−6	28	28	22	22	34	32	30	20	26	18	36	20	24	40	30	..	..	..	16.6
Point Pleasant	Maximum	61	26	20	42	10	29	46	49	44	27	26	18	41	46	42	42	60	56	65	61	53	52	56	56	57	75	68	45	..	..	..	45.4
	Minimum	24	2	−1	4	−8	1	22	30	11	5	0	−2	−1	30	24	13	23	36	33	34	23	26	27	31	22	47	36	30	..	..	..	18.6
Powellton	Maximum	71	31	19	43	16	26	45	49	42	28	30	20	42	43	39	46	65	55	56	56	61	59	62	56	63	76	67	43	..	..	..	46.8
	Minimum	29	5	0	8	−2	5	19	32	14	9	15	6	6	30	30	30	30	42	37	43	30	31	34	38	28	47	42	35	..	..	..	24.0
Robertsburg§	Maximum	36	11	29	42	12	35	46	48	18	28	21	19	44	48	34	43	62	42	64	51	58	55	57	49	60	75	43	40	..	..	..	41.8
	Minimum	35	10	2	3	−5	−4	12	29	16	5	8	2	0	3	28	12	23	34	35	37	21	28	29	37	25	26	41	33	..	..	..	18.8
Ryan	Maximum	65	26	16	40	7	25	45	45	40	24	33	25	40	40	35	39	60	54	61	57	59	52	53	52	59	76	70	44	..	..	..	44.4
	Minimum	26	5	0	6	6	1	16	23	14	1	6	−4	−3	30	15	9	17	35	31	37	23	23	24	36	22	43	42	32	..	..	..	17.6
Spencer§	Maximum	..	..	..	..	34	45	59	50	22	40	41	37	40	45	47	44	59	63	65	67	60	63	69	65	64	73	62	..	..	..	..	52.8
	Minimum	19	9	0	9	7	1	6	19	16	3	5	−4	−3	19	27	20	16	25	28	32	27	18	21	39	36	34	38	29	..	..	..	17.2
Union§	Maximum	41	10	40	30	10	40	29	20	22	20	22	25	42	43	45	36	38	58	60	58	60	59	58	71	72	66	51	..	..	..	..	41.7
	Minimum	40	6	−6	−4	−7	−5	7	11	14	3	5	3	1	23	27	30	20	22	25	30	25	27	30	32	25	29	34	31	..	..	..	17.1
White Sulphur Spgs.	Maximum	63	30	18	42	38	27	44	49	38	29	26	28	41	43	40	42	42	59	45	57	57	55	55	53	59	73	68	51	..	..	..	45.4
	Minimum	29	5	−4	14	−6	0	8	23	12	5	4	3	8	27	33	25	24	23	29	38	22	29	29	41	22	32	50	34	..	..	..	20.0
Williamson§	Maximum	40	20	30	43	12	30	40	40	22	29	30	18	46	45	38	48	63	53	58	58	64	58	62	50	63	78	56	40	..	..	..	44.1
	Minimum	37	10	1	2	0	1	12	26	22	10	11	10	10	12	33	30	30	30	39	40	32	32	33	43	30	30	49	37	..	..	..	23.3

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

S

IMMED

By a

W E

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MARCH, 1917

BY
HENRY C. HOWE
METEOROLOGIST

UNIVERSITY OF ILLINOIS LIBRARY
MAY 10 1917

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
APRIL 25, 1917

Departure of the Mean Temperature from the Normal, March, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXV. PARKERSBURG, W. VA., MARCH, 1917. No. 3.

GENERAL SUMMARY.

The past month was the wettest March of record. The precipitation averaged from seven to nine inches over a large portion of the State, while at Pickens and Camden-on-Gauley the monthly amounts were 14.20 and 13.55 inches, respectively. The previous record of excessive monthly rainfall for March was 10.05 inches at Weston in 1898. While the temperature averaged somewhat lower than usual, the month was free from severe cold waves. After the 10th the temperature conditions were especially favorable for winter grains and fruits, but peaches were injured considerably, especially in the higher altitudes, by sleet and cold rains during the first decade. At the close of the month the outlook for apples was good and the condition of wheat was more favorable than on March 15.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.10 and 30.09 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.50 inches on the 1st, and 29.61 inches on the 27th. Elkins, 30.46 inches on the 2d, and 29.60 inches on the 27th.

TEMPERATURE.

The monthly mean for the State, 49 stations reporting, was 41.9°. The mean departure from the normal for 41 stations having ten or more years of record was —0.8°. Cool weather prevailed until the 10th, with the lowest readings on the 6th. After the 9th the temperature was continuously above the normal, except the 13th, 18-19th, and 28-30th, with the highest readings on the 31st. On the 6th the morning readings ranged generally from near zero to 10° above zero, while the maximum temperatures at many stations on the 31st were near or slightly above 80°.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 74 per cent; 8 p. m., 67 per cent. The March averages for the same hours for the past 28 years are 80 and 69 per cent, respectively. Elkins, 8 a. m., 77 per cent; 8 p. m., 66 per cent. The March averages for Elkins for the same hours for the past 17 years are 83 and 71 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 64 stations reporting, was 6.58 inches. The departure from the normal for 45 stations with ten or more years of record was +2.25 inches. The precipitation was heaviest over the southern two-thirds of the State, especially the northern half of the Great Kanawha Basin and the upper portion of the Monongahela Basin. The amounts were lightest over the northern and northwestern counties. Light to moderately heavy snow or rain fell from the 2d to the 5th, the greatest amounts being recorded on the 3d and 4th. Light to moderate rain occurred on the 8th and heavy rain fell in most sections from the 11th to the 14th. Moderately heavy rain, with light snow in many localities, also fell on the 17-18th, and light to moderately heavy rain on the 21st, 23d-24th, and 27th.

RIVERS.

Owing to heavy rain and melted snow, the rivers were high from the 4th to the 8th, flood stages being reached in many sections of the Great Kanawha Basin. The heavy rains from the 11th to the 14th also caused slight to moderate floods in practically all the rivers in the State. The following crest stages were noted in the Ohio: Wheeling, 37.0 feet; Parkersburg, 38.5 feet; Point Pleasant, 47.3 feet; Huntington, 50.0 feet.

WIND.

The average wind velocity at Parkersburg was 8.2 miles per hour, or 0.8 mile above the March average for the past 27 years. The average at Elkins was 6.1 miles per hour, or 0.6 mile above the March average for 17 years. The highest velocity at Parkersburg was 34 miles per hour from the northwest on the 27th, and at Elkins 30 miles per hour from the west on the 27th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 47 per cent of the possible amount, or 8 per cent above the March average for 19 years. The average at Elkins was 49 per cent, or 12 per cent above the March average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bayard, 3d, 14th, and 21st; Dam No. 26, 6th, 7th, and 22d; Elkins, 10th and 22d; Grafton, Hinton, and Mannington, 22d; Marlinton, 2d, 3d, and 4th; New Cumberland, 22d; Nuttallburg, 5th; Pickens, 3d and 4th; Robertsburg, 6th, 7th, and 22d; Rowlesburg and Smithfield, 22d; Terra Alta, 12th and 21st; Wheeling, 2d, 3d, 6th, 10th, 22d, and 26th; Williamson, 15th and 16th.

Hail: Bayard, 27th; Evans, 12th; Glenville, 11th and 12th; Robertsburg, 11th.

Halos, lunar: Bayard, 2d; Elkins, 31st.

Halos, solar: Elkins and Wellsburg, 16th.

Haze, light: Bayard and Parkersburg, 31st.

Sleet: Bancroft, 5th; Bayard, 3d, 13th, and 14th; Bens Run, 13th; Brandywine, 1st and 13th; Davis, 14th; Holcomb, 1st, 2d, and 4th; Moundsville, 12th; Pickens, 2d; Smithfield, 27th; Terra Alta, 4th and 13th; Wheeling, 13th and 27th; Wellsburg, 13th.

Thunderstorms (dates and number of stations reporting): 11th, 19; 12th, 13; 13th, 1; 14th, 1; 17th, 1; 21st, 1; 23d, 5; 27th, 3; 31st, 1.

COMPARATIVE DATA FOR MARCH.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	34.9	..	....	4.91	....	....	...	..	..	..
1892	36.4	87	8	3.50	....	....	....	..	..	..
1893	40.7	84	3	1.49	2.89	0.89	5.2	8	8	15
1894	45.8	88	1	1.94	3.05	0.74	1.9	15	9	7
1895	39.6	90	0	3.05	4.75	0.89	7.9	11	9	11
1896	36.1	76	—10	4.45	8.40	1.76	....	10	8	13
1897	46.1	81	12	3.60	6.52	1.33	....	9	10	12
1898	48.5	86	9	5.43	10.05	1.25	T.	8	9	14
1899	42.5	76	0	5.82	8.48	2.40	4.5	7	9	15
1900	38.5	78	— 5	3.79	6.48	2.18	14.7	7	9	15
1901	42.9	83	—11	3.23	5.27	0.90	2.3	8	8	15
1902	43.4	80	— 5	4.30	6.29	3.00	15.0	10	9	12
1903	51.3	87	13	4.47	6.59	2.70	0.2	10	9	12
1904	43.8	86	7	4.12	6.10	1.38	1.9	9	8	14
1905	46.6	88	— 2	4.10	6.46	1.45	0.7	14	7	10
1906	37.3	75	— 7	4.77	8.11	1.98	13.4	7	6	18
1907	49.6	94	2	4.77	8.18	1.05	4.2	12	8	11
1908	47.8	89	15	6.04	8.60	1.23	1.1	11	8	12
1909	40.8	83	10	3.38	8.66	1.10	4.7	9	10	12
1910	49.5	90	5	0.55	2.25	0.04	1.1	18	9	4
1911	40.5	90	— 5	3.30	7.86	1.12	5.2	11	8	12
1912	39.9	80	6	5.02	9.36	1.78	5.1	8	7	16
1913	45.7	89	— 3	4.53	7.90	1.77	2.7	11	9	11
1914	37.3	83	—13	3.03	7.11	0.89	17.7	10	8	13
1915	34.4	63	7	1.61	4.32	0.53	6.7	12	7	12
1916	38.5	88	— 4	4.88	9.88	2.49	9.0	11	7	13
1917	41.9	85	— 3	6.58	14.20	3.10	11.6	14	4	13
Means and extremes	42.2	94	—13	3.95	14.20	0.04	5.9	10	8	13

Climatological Data for March, 1917.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	34.9	−2.5	72	31	2	6	35	4.33	−0.12	1.19	22.5	19	10	4	17	w.	G. C. Dixon.
Brandywine	Pendleton	0	41.4	.....	80	31	3	6	46	6.01	.....	1.65	11.0	16	21	0	10	n.	Elmer Keister.	
Burlington	Mineral	875	22	39.5	−1.5	80	31	8	7	48	4.95	+1.85	1.10	27.0	11	7	18	6	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27	.....	.....	.....	.....	.....	.....	.....	4.02	+0.91	0.90	11.8	10	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	24	41.3	+1.5	84	31	17	7	45	4.50	+1.29	1.20	22.0	13	17	6	8	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	43.2	−0.3	85	31	5	6	51	3.72	+1.05	1.15	.....	12	22	1	8	.....	M. S. Henkel.
Piedmont	Mineral	919	0	39.8	.....	78	31	11	7	43	7.67	.....	2.68	23.5	18	17	8	6	se.	C. A. Suter, Jr.
Romney [i]	Hampshire	824	19	41.5	−0.8	80	31	13	6	45	4.05	+0.96	1.80	34.0	.....	.....	.....	.....	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	41.8[b]	−1.1	.....	.....	8[b]	6	39[b]	4.75	+2.30	1.50	.....	10	19[a]	3[a]	8[a]	.....	J. M. Mallow.
Averages and	extremes	.....	....	40.4	−0.8	85	31	2	6	51	4.89	+1.18	2.68	21.7	14	16	6	9	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	43.2	+0.4	79	31	7	6	40	5.42	+1.16	1.05	35.0	13	16	3	12	.....	J. D. Riggs.
Brandonville	Preston	1,809	6	.....	.....	.....	.....	.....	.....	.....	4.20	.....	0.80	18.0	9	.....	.....	.....	.....	W. T. Miller.
Buckhannon	Upshur	1,411	20	41.6	+0.3	76	31	6	6	41	7.01	+2.52	1.30	8.0	13	16	1	14	.....	H. A. Darnall,
Cairo	Ritchie	674	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Van A. Zevely.
Central Station	Doddridge	950	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. H. Doak.
Cheat Bridge	Randolph	3,600	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Walter Cole.
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	4.81	.....	0.90	9.0	10	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	15	42.2	−1.4	76	31	5	6	43	7.21	+3.35	1.72	8.0	15	10	5	16	w.	J. M. Reed.
Davis	Tucker	3,093	8	.....	.....	.....	.....	.....	.....	.....	9.29	.....	2.90	33.5	15	11	2	18	sw.	Ross C. Male.
Elizabeth	Wirt	646	5	.....	.....	.....	.....	.....	.....	.....	7.50	.....	1.85	.....	12	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,940	16	40.0	+0.9	78	31	12	6	46	7.12	+3.05	1.74	8.5	20	10	4	17	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	40.3	−1.1	79	31	8	6	56	5.50	+1.52	1.37	14.0	15	17	0	14	w.	F. P. Hall.
Glenville	Gilmer	738	23	44.9	+1.0	83	31	5	6	51	8.17	+4.02	1.86	6.0	16	12	8	11	w.	M. T. Brannon.
Grafton	Taylor	1,000	24	41.0	−1.6	79	31	7	6	45	4.60	+0.53	1.20	18.2	9	14	4	13	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	41.0	−1.5	78	31	4	6	45	4.22	+0.11	1.01	9.2	14	16	2	13	w.	Allen Smith.
Mannington	Marion	974	14	40.2	−2.6	78	31	0	6	48	5.22	+1.42	1.15	13.6	17	12	4	15	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	41.2	−0.8	76	31	12	6	38	3.10	−0.71	0.82	14.8	16	16	2	13	sw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	14	42.8	−0.3	77	31	4	6	45	.....	.....	.....	.....	.....	14	4	13	s.	M. Z. White.
New Cumberland [g]	Hancock	987	19	39.8	+0.1	76	31	5	6	40	4.26	+0.85	1.39	8.0	13	7	16	7	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	41.8	−1.6	80	31	5	6	42	4.47	+0.72	1.08	.....	16	13	5	13	s	Wm. Ankrom.
Parkersburg	Wood	638	28	42.2	0	80	31	7	6	35	4.46	+0.64	1.19	13.9	16	14	4	13	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	38.8	−3.0	75	31	5	6	47	3.53	−0.69	0.63	9.5	11	13	3	15	.....	J. W. Swisher.
Philippi	Barbour	1,149	20	42.4	−0.1	80	31	4	6	50	6.26	+2.08	1.05	17.0	12	10	13	8	w.	Okey J. Robinson.
Pickens [g]	Randolph	2,697	14	40.0	+0.5	79	31	10	19	53	14.20	+8.64	2.47	22.0	17	14	4	12	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30	.....	.....	.....	.....	.....	.....	.....	7.22	+2.97	1.30	.....	17	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	8	.....	.....	.....	.....	.....	.....	.....	5.34	.....	1.00	.....	13	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	11	40.6	−1.1	80	31	3	6	47	4.98	+0.81	1.50	11.5	16	16	7	8	ne.	G. M. Whisler.
Terra Alta	Preston	2,612	16	35.7	−3.3	72	31	7	6	40	4.06	−1.12	0.60	16.5	16	13	6	12	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	38.5	−0.4	73	31	10	6	32	3.17	−0.18	0.90	16.2	13	10	6	15	w.	C. P. Waugh.
Weston	Lewis	1,026	21	42.6	−0.9	78	31	5	7	51	6.80	+2.37	2.05	.....	17	12[a]	3[a]	15[a]	.....	Weston State Hospital.
Wheeling	Ohio	645	30	40.2	.....	80	31	6	6†	45	4.22	+1.14	0.83	14.7	18	14	3	14	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	41.0	−0.8	83	31	0	6	56	5.79	+1.60	2.90	14.8	14	13	5	13	w.	
Southern Division.																				
Bancroft	Putnam	574	12	42.8	−1.4	82	31	10	6†	48	6.97	+3.10	1.57	7.2	14	15	0	16	s.	R. E. Dent.
Beckley	Raleigh	2,440	16	46.9	+4.1	79	14	8	6	44	8.90	+5.29	1.64	4.0	15	11	6	11	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Norfolk & Western Ry
Camden-on-Gauley	Webster	2,062	1	.....	.....	.....	.....	.....	.....	.....	13.55	.....	2.00	.....	11	5	0	26	.....	C. A. Droddy.
Charleston	Kanawha	597	13	48.4	−0.3	84	31	10	6	53	8.26	+4.14	1.30	6.0	15	12	2	17	w.	C. V. Lewis.
Clay	Clay	706	0	45.8	.....	85	31	10	6	50	9.66	.....	1.42	4.0	15	15[a]	2[a]	13[a]	.....	Prof. E. H. Knabenshue
Cuba	Jackson	650	14	42.0	−2.0	82	31	−1	6	54	4.90	+1.32	1.55	2.5	14	12	11	8	w.	C. T. Perry.
Dam 19 O. R.		557	0	.....	.....	.....	.....	.....	.....	.....	5.18	.....	1.26	8.0	14	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	1	.....	.....	.....	.....	.....	.....	.....	6.00	.....	1.09	9.0	15	.....	.....	.....	.....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0	.....	.....	.....	.....	.....	.....	.....	7.15	.....	1.40	.....	13	.....	.....	.....	sw.	U. S. Engineer Office.
Dunlow	Wayne	703	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James W. Damron.
Elkhorn††	McDowell	1,933	23	40.8	−5.0	69	31	9	6	34	7.94	+3.64	1.91	1.0	15	12	9	10	w.	J. J. Lincoln.
Evans	Jackson	606	0	44.2	.....	78	31	6	6	36	6.77	.....	1.22	14.0	16	11	5	15	.....	B. F. Sayre.
Green Sulphur Spgs	Summers	1,600	20	46.2	+3.3	78	31	13	6	45	8.00	+4.38	1.55	.....	12	17	1	13	e.	W. H. Gwinn.
Hinton	..do	1,450	19	43.2	−0.9	78	31	15	6	46	8.47	+4.57	1.20	1.0	16	12	3	16	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	24	40.9	.....	71	31	8	6	45	8.72	.....	.....	7.0	17	12	5	14	.....	R. C. Ferguson.
Huntington	Cabell	538	0	42.6	−1.9	80	31	9	6	46	8.53	+4.25	1.30	12.8	16	14	3	14	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	0	.....	.....	.....	.....	.....	.....	.....	9.03	.....	1.36	5.5	18	.....	.....	.....	.....	Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	16	42.4	+0.2	75	31	14	6	47	7.26	+3.28	1.24	T.	15	11	11	9	nw.	Geo. T. Argabate.
Logan [f]	Logan	687	13	.....	.....	.....	.....	.....	.....	.....	6.11	+1.09	1.04	3.5	.....	17	0	8	.....	Agent C. & O. Ry.
Madison	Boone	704	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	36.9	−1.9	70	31	10	6	46	9.40	+5.52	1.51	2.5	17	10	13	8	nw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	23	42.8	−2.3	82	31	2	6	45	6.84	+2.74	1.42	13.0	11	8	4	19	sw.	W. D. Holmes.
Powellton	Fayette	933	20	46.0	+0.4	82	31	12	6	38	7.18	+2.64	1.00	.....	13	15	6	10	.....	S. C. Lampert.
Rainelle	Kanawha	2,425	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Guthrie.
Raleigh	Beckley	2,130	0	.....	.....	.....	.....	.....	.....	.....	9.35	.....	1.49	1.5	18	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	0	.....	.....	.....	.....	.....	.....	.....	8.25	.....	1.36	.....	14	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	16	42.4	−2.3	81	31	7	6	48	6.59	+2.58	1.42	5.0	13	13	0	18	n.	E. C. Brace, Jr.
Ryan	Roane	700	13	41.2	−2.7	81	31	0	6	59	7.82	+3.66	1.54	9.0	16	12	5	14	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	0	.....	.....	.....	.....	.....	.....	.....	8.35	.....	1.81	.....	9	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	12	48.8	.....	76	28	−3	6	62	6.20	+2.52	1.30	8.5	9	11[a]	0[a]	19[a]	.....	A. M. McKown.
Sutton	Braxton	839	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. B. Eakle.
Union	Monroe	2,250	12	42.2[z]	−0.6	.....	.....	14	6	47[a]	8.00	+4.49	1.20	T.	14	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	44.0	.....	77	31	10	6	51	7.55	.....	1.25	T.	14	18	5	8	nw.	J. M. Ayres.
Williamson	Mingo	660	16	44.0	−3.0	80	31	14	6†	47	9.26	+4.96	1.45	2.7	18	17	2	12	w.	J. F. Keyser.
Averages and	extremes	.....	....	43.6	−0.8	85	31	−3	6	62	7.90	+3.62	2.00	5.5	14	13	4	14	w.	
State averages and	extremes	.....	....	41.9	−0.8	85	31	−3	6	62	6.58	+2.25	2.90	11.6	14	14	4	13	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[z] Approximated by the observer.

Daily Precipitation for March, 1917.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac	.06	.08	.03	.16	.15	.07		.29	.01		1.19	.21	.41	.18			.43	.09	.04		26		.20	.42			.05	T.	T.			4.33
Brandywine	do	.42	.52	.28	1.65	.10		.32				.15	.70	.90	.12			.32	.06			.35		.02	.06			.04		T.			6.01
Burlington	do	.20	.80	.30	1.10							.30		.90				.25	.20			.31		.44				.15	T.				4.95
Harpers Ferry ‖‖	do	.41	.10	.60	.90	.60			.20						.60			.20	T.			T			.31			.10					4.02
Martinsburg	do	.15	.70		1.20				.43			.07		.33	.40			.42	.05			.30		.28				.12		.05			4.50
Moorefield	do	.24	*	.80	T.	.35			.18			.17	.04	1.15				.42	T.	.01		.28								.08			3.72
Piedmont	do	.22	.41	.60	2.68	.32			.10			.25	.11	1.22	.56			.55	.04	.03		.25	.02	.14	.03			T.	T.	.14			7.67
Romney	do	.20	.60	.30		1.80		*	*	*	*	*	*		.80							.23		.12				T.		T.			4.05
Upper Tract	do	T.	T.	.30	1.50				.20			.25	.60		.60	.20		.20	T.			.20	T.		.10								4.75
Northern Division.																																	
Bens Run	Ohio		.31	.40	.88	.15						.78		1.05	.25			.20	.13			.33		.28	.56			.10					5.42
Brandonville ‖‖	Monongahela	.80		.40	.60								.40		.80			.45				.31	.09		.35								4.20
Buckhannon	do			.90	.80	.10						1.10	1.30	.68				.62	.20			.35		.30	.27			.34		.05			7.01
Cairo	Little Kanawha																																
Central Station	Middle Is. Creek																																
Cheat Bridge ‖‖																																	
Cortland ‖‖	Monongahela				.70					.10		.90	.70	.30		.40		.61				.34		.56						.20			4.81
Creston ‖‖	Little Kanawha	.30	T.	.80	.70	.55	T.		.17			.15	1.57	.04	.85	T.		.44	.07			.30			.97			.20	.10	T.			7.21
Davis ‖‖	Monongahela	.80	T.	.30	.70	.30	.30		T.	.20			2.90		1.10			.65	.20	.30		T.	.45		.64				.35	.10	T.		9.29
Elizabeth ‖‖	Little Kanawha			1.00	.79	.38			.23				1.85		.70			.48		.04		.32		.02	1.32			.37					7.50
Elkins ***	Monongahela	.11	.57	.33	1.09	.06			.38	.01		1.22	.52	.85	.20		.03	.42	.08			.49		.21	.25			.17	.01	.12			7.12
Fairmont ‖‖	do	.30		.55	.40	.83	T		.15	T.	T.	T.	.44	.01	1.37	T.		.56	.05	.08		.16	T.	T.	.45			T.	.12	.03			5.50
Glenville ‖‖	Little Kanawha	.68	.10	.74	.62	.61			.28			.43	1.86	.16	.77			.46	.04			.24	.28		.72			T.	.18				8.17
Grafton	Monongahela		.62		1.20	T.			.12			.36		1.13				.38	T.			.18		.40				.21					4.60
Lost Creek	do		.22	.24	.34	T.			T.	T.		.50	.30	.71	.11			.52	.08	.06		T.		.70	.31			.10		.03			4.22
Mannington	do		.25	.25	.61	.34	T.		.16	T.		.40	.12	1.15	.32			.51	.04	.06		.23		.29	.27			.15		.07			5.22
Morgantown	do		.15	.06	.44	.20	T.		.14			.18		.82	.08			.38	.03	.01		.18		.14	.14			.10		.05			3.10
Moundsville	Ohio																																
New Cumberland	do		.10		.30	.25		T.	.55			1.39		.03	.35			.15	.10			T.		.52	.32			.03		.17		T.	4.26
New Martinsville	do		.20	.10	.67	.20		.05	.15			.45	.05	1.08	.18			.08	.05			.40		.25	.48			.08					4.47
Parkersburg ***	Ohio		.35	.11	.78	.10		.14	T.		T.	.45	.03	.45	.22		.15	.17	.03		.02	.23		1.19				.04		T.			4.46
Parsons	Monongahela	.20	.20	T.	.40	.10							.60	.25			.63				.58		.37					.05		.15			3.53
Philippi	do		.40		.80		.40	.90	1.00				.55		1.05	.21		.10				.15		.30				.40					6.26
Pickens	do	.20	.28	1.33	.97	.40			1.04	.20		1.52	2.47	1.24	.53			.50	.20			2.11		.18	.30			73		T.			14.20
Rowlesburg ‖‖	do	.82		.70	.58	.65	.10		.50	T.	T.		.50		1.30	.12		.55	.10	.12		.08	.10		.60				.36	.04			7.22
Saint Marys ‖‖	Ohio	.12		.53	.40	.35	T.		.18				.65	T.	1.00	T.		.90	.03	.05		.10	T.		.98					.05			5.34
Smithfield ‖‖	Fishing Creek			.35	.50	.30	.10		.25			.15	.30	T.	1.50			.34		.10		.29	.03		.62			.04	.10	.01			4.98
Terra Alta	Monongahela		.40		.60	.30	.10			.05		.25	.15	.25	.40			.05	.10	.10		.31		.55				.20		.25			4.06
Wellsburg	Ohio		.10		.90	.30		.10				.20		.30	.35			.13	.02			.15		.40	.12			.10		T.			3.17
Weston	Monongahela		.40	.55	.90	.06			.23			.35	1.70	.65	.10			.54	.02	.05		.20		.25	.40			.30		.10			6.80
Wheeling ‖‖	Ohio	.15		.18	.75	.40	T.		.15	.01	T.	.02	.18	.30	.83	T.		.10	.16	.05		.20	.03		.60				.09	.02	T.		4.22
Southern Division.																																	
Bancroft ‖‖	Great Kanawha	.55	.02	.88	.50	.10			.05				.74	.46	1.57			.50	T.	T.		.64	.05		.86			.05					6.97
Beckley	do	.80	.51	.55	1.64	.15			.22				.96	.55	.12			.66	.20			.55		.52	1.04			.45					8.90
Bluefield	do																																
Camden-on-Gauley ‖‖	do	T.	1.96	.75	.10			1.10				2.00		1.44				.75	T.			2.00		1.90				.80		.75			13.55
Charleston ‖‖	do	.50	.04	.90	1.30	.38	T.		.10			T.	.66	.42	1.15	T.		.60	T.	T.		.82	.20		.97			.04	.18				8.26
Clay	do	.78	.90	.25	1.42	.30			.60			.78	.53	1.05	.26			.48				1.13		.50	.28			.40					9.66
Cuba	Sand Creek		.05		.10	.05		.10	.20			.50	1.05	.70	.10			.55	.05					.75	.60			.10		T.			4.90
Dam 19 O. R. ‖‖	Ohio	.18		.37	.44	73			.16			T.	.61	.03	.72			.33	.01	T.		.28			1.26			.03	.03				5.18
Dam 22 O. R. ‖‖	do	.25		.78	.46	.27			.28			.10	1.09	.18	.72			.49		.02		.37			.93			.03	.03	T.			6.00
Dam 26 O. R. ‖‖	do	.30		.93	.59	.38			.12				1.06	.48	1.40			.41				.55			.81			.09	.03				7.15
Dunlow	Big Sandy																																
Elkhorn	do	.63	.79	.73	.87	.05			.31				.69	.09	.17		.68		.05			.40		.27	1.91			.30					7.94
Evans	Ohio	.06	.41	.62	.75	.32		T	.26			.24	1.22	1.03	.10			.29	.11			.45		.22	.46			.23					6.77
Green Sulphur Spgs.	Great Kanawha	.70	.45	.70	1.55	.30							1.20	.65	.12		.63							.25	1.15		.30							8.00
Hinton ‖‖	do	.76	.50	1.08	1.06	.40	T.		.16			T.	.62	.78	.22			.99	T.	.18		.28	.04	T.	1.20			.14	.06				8.47
Holcomb	do	*	*	*	*	2.97			.46			*	.88	*	1.12			.68	*	.25		.67		*	1.16			.53					8.72
Huntington ‖‖	Ohio	.26	T.	1.12	.94	.36	T.		.20				1.30	.64	1.10			.46	.05	.02		.66	.22		1.06			.12	.02				8.53
Kayford ‖‖	Great Kanawha	.76	.32	.98	.82	.60	.35	.10	.28				1.36	.52	.40			.62	T.	.15	.22	.26	.15		.97			.17					9.03
Lewisburg	do	.66	.27	.72	1.24	.11			.44			.07	.41	.55	.13			1.12	T.			.26		.46	.66			.06					7.26
Logan	Guyandotte	.55	.55	.93	1.04		T.	T.	.35	T.	*	*	*	*	.13	T.	T.	.74	T.		T.	.53	.47	*	.54		T.	.24	.04	T.	T.	T	6.11
Madison ‖‖	Great Kanawha																																
Marlinton	do	.55	.35	1.15	1.51	T.			.65	.03		.33	.01	.90	.47			.78	.05	T.		.72		.64	.58			.10		.08			9.40
Nuttallburg	do																																
Point Pleasant ‖‖	Ohio		.42		1.04	.53			.12			T.	1.42	.33	.80			.43	T	T.		.56			1.13			.06					6.84
Powellton		.60	.55	.65	1.00	.75							.93	.83	.10			.53	.12			.51		.30				.31					7.18
Rainelle ‖‖	Great Kanawha																																
Raleigh ‖‖	do	.76	.47	.96	1.47	.27	T.		.47			T.	.90	.47	.20	.04		.72	.16	.10		.35	.09		1.49			.27	.16				9.35
Renick ‖‖	do	.10	.60	.90	1.30	.50			.50			.10	.30	.40	.80	.10		.95				.34			1.36								8.25
Robertsburg ‖‖	do	.25		.93	.13	T.			.42			.08	.98	.43	1.42			.45	T.	T.		.50			.85			.08	.07				6.59
Ryan	do	.04	.48	.42	1.05	.23		.01		T.		.48	1.11	1.54	.15			.54	.13			.62		.41	.46			.15					7.82
Sissonville ‖‖	do	.75	1.00	T.	T.	.50		T.	1.31	T.	T	.56	1.81	T.	T.	T.		T.	T.		T.	1.44		.82			T.	.16					8.35
Spencer ‖‖	Little Kanawha	.15	.10	.60	.75							.60	1.30	.70	1.20							.80											6.20
Sutton	Great Kanawha																																
Union ‖‖	do	.25	.50	.85	.85	.40			.60			.90		.50	.20		1.20		T.			.20		.28	1.00			.27					8.00
White Sulphur Spgs.	do	.95	.40	.45	1.25	T.			.50			.20	.25	.50	.15			1.10	T.	T.		.25		.60	.75			.20					7.55
Williamson ‖‖	Big Sandy	.60	.32	1.45	1.12	.76	T.		.22			.02	.85	.30	.60	.03		.97	.02	T		.46	.04		1.20			.24	.06				9.26

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for March, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum...	33	30	35	35	26	35	45	45	31	52	49	53	31	45	41	43	50	32	31	50	48	55	55	51	59	61	58	45	43	45	72	44.6
	Minimum ...	27	22	22	25	11	2	13	30	22	22	38	30	22	23	24	23	31	20	11	22	35	32	33	31	29	31	31	25	32	25	37	25.2
Brandywine	Maximum...	38	34	43	40	32	40	50	49	44	63	57	66	52	60	55	57	60	50	43	61	55	61	53	58	61	65	64	52	54	62	80	53.5
	Minimum ...	31	29	27	30	24	3	10	36	20	25	36	46	30	32	35	27	36	25	18	24	35	29	36	42	24	30	41	30	36	30	34	29.4
Burlington	Maximum...	37	32	36	37	30	37	47	47	41	54	63	62	37	39	50	48	59	42	39	60	41	58	60	56	63	67	68	52	54	57	80	50.1
	Minimum ...	29	28	28	30	21	19	8	34	35	23	30	31	28	30	26	29	39	26	22	20	38	29	29	39	26	29	37	34	32	34	32	28.9
Martinsburg§	Maximum...	37	35	35	34	34	38	48	50	43	53	67	55	35	39	53	50	58	41	41	64	43	61	57	60	66	68	63	55	55	60	84	51.0
	Minimum ...	33	30	29	31	31	18	17	23	36	32	35	45	31	29	29	32	34	34	21	24	28	30	32	43	31	33	39	36	39	37	39	31.6
Moorfield	Maximum...	42	37	40	37	34	45	52	51	45	57	68	63	49	47	51	54	64	55	45	66	62	63	62	67	67	70	68	57	56	65	85	55.6
	Minimum ...	32	30	28	32	24	5	9	34	34	20	32	48	29	31	29	29	39	31	22	22	40	28	35	44	27	33	44	31	39	36	34	30.7
Piedmont	Maximum...	35	36	34	33	31	43	47	45	41	54	61	58	39	40	49	47	55	41	39	59	54	59	55	56	64	65	62	51	50	57	78	49.6
	Minimum ...	32	29	27	31	21	17	11	35	33	23	33	37	27	29	31	29	37	28	19	21	39	31	32	39	29	33	41	31	37	33	35	30.0
Romney	Maximum...	36	37	38	35	37	39	....	....	....	....	....	....	65	39	39	....	....	....	49	62	63	60	62	57	65	68	65	53	54	58	80	52.8
	Minimum ...	32	28	30	27	24	13	....	....	....	....	....	....	30	30	28	....	....	....	20	20	41	27	40	41	28	34	33	32	36	36	35	30.2
Upper Tract	Maximum...	52	46	42	35	31	42	50	50	45	59	60	60	....	55	50	52	58	56	45	60	57	60	56	55	60	65	60	59	53	58	....	52.8
	Minimum...	31	30	27	31	25	8	18	37	32	20	39	48	....	30	30	37	28	24	20	24	40	30	35	42	27	35	40	28	40	33	....	30.7
Northern Division.																																	
Bens Run	Maximum...	38	33	40	37	32	38	50	45	62	64	64	60	43	50	50	58	56	55	42	59	54	64	63	60	67	72	61	54	51	58	79	53.5
	Minimum ...	29	27	32	29	17	7	18	38	38	50	54	36	31	39	34	29	38	27	19	28	42	29	38	35	32	39	39	34	44	31	39	33.0
Buckhannon	Maximum...	35	34	41	37	35	36	55	48	40	58	55	58	45	58	50	58	56	38	38	58	54	56	65	60	64	68	50	59	46	55	76	51.2
	Minimum ...	30	27	32	32	18	6	14	32	32	24	45	37	32	43	35	29	38	30	28	26	44	36	38	40	32	35	36	36	36	33	40	32.1
Creston	Maximum...	37	36	40	37	33	38	57	47	45	64	58	59	44	56	56	60	56	40	44	62	59	67	64	60	67	73	65	56	54	62	75	53.9
	Minimum ...	32	30	32	29	18	5	14	34	35	22	42	41	33	40	32	28	39	29	19	25	43	32	36	34	28	36	34	33	35	25	34	30.6
Elkins	Maximum...	35	37	41	37	34	40	54	47	37	63	60	58	40	56	48	62	53	32	38	58	46	60	58	56	63	66	63	48	49	55	78	50.7
	Minimum ...	28	26	34	31	15	12	15	33	24	20	49	33	31	39	30	27	31	21	14	24	39	31	47	31	26	43	30	29	36	31	32	29.4
Fairmont§	Maximum...	36	33	41	33	23	40	65	43	38	65	59	43	48	57	52	63	56	34	42	60	54	65	62	59	69	73	61	53	50	60	79	52.1
	Minimum ...	30	28	29	29	23	8	9	14	32	22	25	41	31	32	36	29	31	30	14	18	41	31	32	36	29	37	43	32	34	27	32	28.5
Glenville §	Maximum...	43	37	41	40	35	46	65	53	48	70	70	61	51	58	56	66	66	44	48	64	62	69	69	61	71	75	73	55	55	63	83	58.0
	Minimum ...	32	29	32	31	18	5	14	38	34	22	41	44	33	40	35	33	43	28	18	25	43	31	36	35	36	35	40	33	44	25	34	31.8
Grafton	Maximum...	34	34	38	38	38	41	52	51	42	59	59	57	42	55	55	58	58	41	36	55	55	58	58	56	68	68	67	53	53	59	79	52.2
	Minimum ...	29	28	32	32	20	7	13	38	22	23	37	37	32	42	35	27	41	29	15	23	43	32	32	35	27	33	35	32	28	27	34	29.7
Lost Creek	Maximum...	36	34	43	38	34	42	52	48	40	64	63	58	42	57	52	60	55	38	41	60	56	61	60	60	65	70	64	52	50	59	78	52.6
	Minimum ...	30	26	32	30	17	4	9	39	32	19	37	38	31	41	35	37	38	27	10	22	43	26	32	34	25	32	36	31	41	25	34	29.5
Mannington	Maximum...	35	35	40	37	33	33	56	44	39	57	60	61	40	56	51	56	55	39	38	58	57	59	61	60	64	70	68	53	51	56	78	51.6
	Minimum ...	29	24	31	29	19	0	8	35	32	20	35	36	31	39	35	26	39	27	10	24	42	29	32	34	27	32	38	32	42	25	34	28.9
Morgantown	Maximum...	34	31	40	34	32	37	61	52	38	58	58	59	40	56	48	57	56	38	38	56	53	60	61	59	65	71	64	51	48	60	76	51.3
	Minimum ...	26	24	28	28	17	12	23	36	30	24	47	34	28	35	34	22	38	25	16	29	40	29	45	36	37	47	36	29	39	28	46	31.2
New Cumberland	Maximum...	38	33	37	37	28	35	54	41	43	....	....	69	59	35	50	42	58	54	37	38	61	52	59	59	56	64	72	67	52	49	57	76	50.4
	Minimum ...	23	24	28	26	17	5	14	34	30	....	....	45	31	27	34	31	27	32	25	13	28	38	28	42	32	31	40	34	30	38	28	44	29.3
New Martinsville	Maximum...	48	33	40	36	32	38	56	44	40	62	60	60	40	54	50	53	54	42	43	60	55	65	60	60	70	72	65	55	51	60	80	52.8
	Minimum ...	29	26	31	29	19	5	14	31	34	24	41	36	32	38	36	31	38	28	18	27	41	32	35	35	32	37	38	32	40	28	40	30.9
Parkersburg	Maximum...	37	32	41	32	29	35	54	45	41	63	62	60	43	55	48	58	54	37	40	60	52	61	62	55	66	71	59	55	52	59	80	51.5
	Minimum ...	28	28	31	27	16	7	20	35	32	28	50	34	32	40	35	31	37	26	21	32	41	31	46	40	36	49	37	34	38	33	47	33.0
Parsons	Maximum...	37	39	38	35	34	37	55	50	35	57	52	56	54	50	60	55	37	36	37	59	60	58	64	60	61	62	49	49	55	75	50.7
	Minimum ...	31	27	27	31	16	5	10	19	30	15	34	38	30	33	27	36	24	16	17	33	29	37	35	24	31	32	33	30	30	30	28	27.0
Philippi	Maximum...	35	32	40	38	31	31	61	60	64	62	69	62	44	62	59	50	39	59	60	50	63	64	62	65	71	71	52	53	62	78	80	55.8
	Minimum ...	25	22	27	27	15	4	20	32	33	21	44	32	28	35	25	29	12	30	25	39	39	48	40	28	31	32	27	36	26	36	30	29.0
Pickens	Maximum...	33	36	45	37	37	51	59	48	34	67	67	55	45	58	54	63	....	34	51	60	47	67	56	57	71	64	56	54	52	63	79	53.3
	Minimum ...	28	25	33	29	13	13	23	33	27	23	43	34	33	39	32	23	....	19	10	29	37	30	43	20	30	40	18	14	22	15	26	26.8
Terra Alta	Maximum...	34	29	35	34	27	31	52	45	32	50	51	54	32	49	44	43	51	33	32	50	47	55	56	52	59	65	58	43	43	49	72	45.5
	Minimum ...	26	22	23	26	11	7	12	31	25	19	41	29	23	27	29	22	32	19	12	23	35	29	38	32	26	36	30	25	32	25	36	25.9
Wellsburg	Maximum...	35	32	36	35	27	33	50	44	37	52	60	56	35	45	41	58	52	32	34	55	48	57	57	55	62	69	60	48	47	52	73	47.6
	Minimum ...	24	25	29	25	17	10	20	32	30	26	42	31	25	33	30	27	32	25	15	28	39	27	40	35	34	42	35	30	37	26	41	29.4
Weston	Maximum...	38	38	41	39	34	38	56	52	44	64	63	58	44	59	52	60	57	40	39	60	58	61	65	62	66	71	66	52	53	57	78	53.7
	Minimum ...	32	24	32	30	12	8	5	40	33	24	44	40	33	42	36	31	40	27	17	28	44	31	38	38	31	38	35	35	42	31	39	31.5
Wheeling §	Maximum...	40	34	40	31	25	40	58	41	41	61	67	40	42	54	50	56	54	36	45	64	62	66	60	60	72	78	60	56	47	63	80	52.4
	Minimum ...	28	29	30	28	20	6	6	15	33	26	27	38	27	28	34	29	30	30	12	19	41	30	31	34	30	34	36	37	34	28	38	28.0
Southern Division.																																	
Beckley	Maximum...	52	39	52	42	41	52	60	65	49	65	74	74	54	79	69	56	62	50	48	68	67	65	62	63	60	69	62	59	69	60	74	60.0
	Minimum ...	28	29	35	32	21	8	28	40	32	25	47	49	39	48	39	32	42	24	20	31	44	34	46	42	31	36	35	29	39	29	33	33.8
Bluefield	Maximum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum ...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Charleston	Maximum...	66	64	62	60	58	57	64	64	62	70	72	69	66	64	64	64	60	60	59	60	58	65	66	65	71	70	69	65	64	65	84	64.7
	Minimum ...	32	32	31	30	25	10	11	21	37	28	29	52	37	37	33	32	35	29	22	23	37	37	38	41	41	42	48	30	36	31	32	32.2
Elkhorn	Maximum...	35	35	39	39	34	39	54	53	43	58	60	59	56	53	53	52	51	48	36	49	53	57	57	49	57	57	56	43	51	55	69	50.0
	Minimum ...	31	30	32	30	16	9	30	36	30	25	45	49	40	37	31	30	38	24	18	23	38	31	46	36	28	37	33	25	38	27	35	31.5
Green Sulphur Spgs.	Maximum...	39	37	40	40	37	45	69	54	62	66	71	65	44	63	56	57	60	60	57	61	61	64	54	57	58	62	64	66	72	76	78	57.9
	Minimum ...	33	34	34	34	18	13	26	33	33	21	43	42	33	33	27	29	34	21	28	18	28	29	34	40	36	40	42	42	56	64	65	34.4
Hinton §	Maximum...	39	37	43	40	27	44	60	53	50	65	70	68	43	62	56	57	60	37	45	61	60	61	58	57	63	67	59	64	63	63	78	55.2
	Minimum ...	35	34	34	35	25	15	16	24	34	26	29	45	41	35	32	32	36	30	22	22	28	34	35	39	30	32	35	31	37	32	32	31.1
Holcomb §.	Maximum...	36	39	45	35	21	47	60	49	44	54	66	59	52	55	52	61	58	40	41	59	54	65	57	55	63	66	59	52	54	60	71	52.6
	Minimum ...	33	29	31	28	19	8	15	25	31	23	29	39	34	36	29	27	32	36	17	20	32	34	40	37	27	30	48	29	31	26	31	29.2
Huntington §	Maximum...	37	35	40	32	27	38	51	47	49	66	70	50	57	55	55	59	51	36	47	64	52	65	63	61	69	72	49	59	58	65	80	53.5
	Minimum ...	32	32	31	29	20	9	11	21	33	28	28	49	35	35	34	34	35	30	26	27	45	35	37	39	34	37	46	34	36	31	34	31.8
Lewisburg	Maximum...	37	38	38	40	37	44	56	52	47	63	65	66	51	60	53	54	58	49	43	59	58	62	58	54	64	61	60	51	56	60	75	53.8
	Minimum ...	32	31	32	33	20	14	20	39	32	21	39	51	32	31	34	32	38	25	18	22	41	32	41	38	26	31	37	29	35	29	28	31.1
Madison §	Maximum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum ...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Marlinton	Maximum...	32	34	36	34	32	36	50	46	38	54	56	60	42	50	46	50	52	34	36	54	52	54	44	48	54	56	50	44	48	54	70	46.6
	Minimum ...	30	28	30	32	20	10	14	32	28	20	34	40	30	30	28	28	34	18	14	18	34	32	32	38	20	24	32	28	32	28	24	27.2
Point Pleasant	Maximum...	38	36	42	34	42	39	57	46	47	68	63	62	42	58	57	60	59	41	46	64	60	63	64	62	70	75	70	57	57	63	82	55.6
	Minimum ...	29	27	30	8	15	2	12	32	32	24	49	36	31	39	31	30	37	26	19	30	42	29	39	34	30	43	38	32	42	25	38	30.0
Powellton	Maximum...	41	35	43	43	35	43	64	55	49	66	70	71	50	59	56	63	61	46	45	63	57	63	65	66	68	70	66	55	60	64	82	57.2
	Minimum ...	32	31	35	32	20	12	27	40	37	28	47	49	40	43	36	33	45	28	22	30	45	35	39	36	32	36	39	36	42	31	45	34.9
Robertsburg§	Maximum...	37	35	41	32	27	40	55	46	45	68	67	47	58	57	54	63	55	35	47	62	51	66	65	60	68	72	56	57	54	63	81	53.7
	Minimum ...	32	31	31	29	19	7	8	20	35	26	28	47	35	35	31	33	34	31	21	24	42	33	38	36	32	38	52	35	37	27	33	31.0
Ryan	Maximum...	35	33	39	36	33	40	61	46	42	60	63	63	45	56	41	60	47	39	33	60	56	59	62	62	55	72	63	51	56	60	81	51.9
	Minimum ...	32	29	33	29	17	0	13	34	33	22	39	40	34	41	27	39	39	27	19	24	40	30	37	24	28	35	37	31	43	35	31	30.4
Spencer§	Maximum...	61	65	70	69	51	59	64	65	67	70	71	70	64	60	62	67	64	59	65	69	64	67	69	70	71	73	75	76	72	74	75	67.0
	Minimum ...	28	23	26	29	27	3	12	21	26	28	39	29	37	34	29	30	28	32	27	19	40	32	35	37	39	38	41	43	46	40	41	30.7
Union §	Maximum...	39	41	41	36	44	56	58	50	64	69	72	60	40	61	54	60	39	60	61	55	62	60	61	65	61	60	65	58	62	66	..	56.0
	Minimum ...	30	31	33	32	20	14	21	25	31	22	27	32	34	31	30	29	30	20	23	23	30	35	35	36	28	29	32	29	30	30	30	28.5
White Sulphur Spgs.	Maximum...	38	39	37	37	35	45	60	54	49	66	68	69	59	62	57	52	61	54	45	61	61	64	60	59	63	65	65	54	60	63	77	56.1
	Minimum ...	33	32	32	32	22	10	17	40	34	42	40	39	33	32	36	29	37	24	24	20	38	28	39	40	40	25	40	31	38	33	26	31.8
Williamson §	Maximum...	37	36	39	32	21	39	60	52	54	69	73	56	54	59	69	60	58	39	49	64	60	65	64	60	69	72	58	58	60	67	80	55.9
	Minimum ...	36	32	33	31	21	14	14	22	23	29	30	52	42	42	35	35	40	31	22	22	32	38	39	42	34	34	42	32	32	32	33	32.1

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

F

HWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

JUN 30 1917

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

APRIL, 1917

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MAY 25, 1917

Departure of the Mean Temperature from the Normal, April, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (—).
Lines show amount of excess or deficiency.

F

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXV. PARKERSBURG, W. VA., APRIL, 1917. No. 4.

GENERAL SUMMARY.

While the temperature for April averaged practically normal, the first half of the month was unseasonally cold and killing frosts or freezing temperatures were general until the 17th. Cold rains and sleet caused much damage to peach orchards, especially in the higher altitudes. During the last two weeks the conditions were more favorable for farm work and growth, and wheat showed considerable improvement at the close of the month. The precipitation was considerably below the normal and favorably distributed, while the snowfall was near the normal and generally unimportant, except in the mountain sections.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.01 and 30.00 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.42 inches on the 3d, and 29.24 inches on the 5th. Elkins, 30.45 inches on the 4th, and 29.31 inches on the 6th.

TEMPERATURE.

The monthly mean for the State, 49 stations reporting, was 51.7°. The mean departure from the normal for 42 stations having ten or more years of record was 0.0°. The month opened warm and unseasonally high temperature also prevailed from the 17th to the 23d, but the weather was abnormally cool from the 7th to the 10th, 13th to the 17th, and on the 27-28th. The highest temperatures were general on the 19th and 20th, while the lowest readings, ranging generally from 20° to 25°, were recorded on the 9th, 10th, and 14th. Freezing temperatures occurred at only five stations after the 17th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 74 per cent; 8 p. m., 63 per cent. The April averages for the same hours for the past 28 years are 75 and 63 per cent, respectively. Elkins, 8 a. m., 77 per cent; 8 p. m., 61 per cent. The April averages for Elkins for the same hours for the past 17 years are 80 and 64 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 63 stations reporting, was 2.99 inches. The departure from the normal for 44 stations with ten or more years of record was —0.53 inch. While the distribution was favorable, the amounts were generally greatest over the west-central counties and least in the Monongahela Basin and extreme northern counties. Light showers were quite general on the 2-3d, and moderately heavy rain, with snow in many sections, on the 5-6th. Except in the mountain sections, the snowfall was light. A fall of 15 inches was received at Pickens, Randolph County, on the 5-6th. Only scattered and light showers were received from the 9th to the 23d. Light to moderate showers occurred daily in many sections from the 24th to the 29th.

WIND.

The average wind velocity at Parkersburg was 6.8 miles per hour, or 0.1 mile above the April average for the past 27 years. The average at Elkins was 4.9 miles per hour, or 0.1 mile below the April average for 17 years. The highest velocity at Parkersburg was 30 miles per hour from the west on the 2d, and at Elkins 27 miles per hour from the west on the 2d.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 51 per cent of the possible amount, or 3 per cent above the April average for 19 years. The average at Elkins was 50 per cent, or 5 per cent above the April average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Brandywine, 30th; New Cumberland, 16th, 18th, 19th, and 20th; Pickens, 28th; Raleigh, 19th; Smithfield, 26th; Williamson, 8th.

Hail: Creston and Robertsburg, 25th; Evans, 25th and 26th.

Halo, lunar: Bayard, 1st.

Halos, solar: Bayard, 4th; Wellsburg, 4th, 7th, 11th, 25th, and 28th.

Sleet: Elkins, 13th; Terra Alta, 5th.

Thunderstorms (dates and number of stations reporting): 2d, 1; 6th, 1; 18th, 3; 19th, 8; 20th, 1; 25th, 16th; 26th, 7; 29th, 1; 30th, 9.

Wind, high: Bayard, 6th; Charleston and Evans, 5th; Elkins, 2d; New Cumberland, 6th and 9th; Parkersburg, 2d, 6th, and 26th; Pickens, 5th and 6th; Piedmont, 6th; Terra Alta, 9th.

COMPARATIVE DATA FOR APRIL.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	52.0	..	....	2.81	....	....	...	..	..	..
1892	50.6	87	17	4.28	....	....	....	..	..	..
1893	53.4	92	20	5.18	8.98	2.91	0.8	8	8	14
1894	50.6	90	14	3.32	5.30	1.97	1.6	12	8	10
1895	52.9	90	17	2.93	5.47	0.90	....	11	9	10
1896	57.7	95	12	2.06	4.35	0.82	....	13	12	5
1897	51.5	90	19	2.97	7.10	1.58	....	11	10	9
1898	48.0	86	2	3.14	4.86	1.40	....	10	9	11
1899	53.4	93	18	1.84	3.17	0.92	0.5	13	9	8
1900	51.8	88	16	1.35	2.08	0.43	T.	14	7	9
1901	47.5	95	18	7.05	10.70	4.95	6.0	10	4	16
1902	49.8	96	21	3.06	4.57	1.53	10.0	10	10	10
1903	51.3	91	8	4.47	7.30	2.29	0.4	11	8	11
1904	47.7	82	12	3.15	5.71	1.12	1.3	9	9	12
1905	52.2	89	14	2.78	5.57	1.10	1.5	11	9	10
1906	54.1	92	15	3.16	6.59	0.57	0.3	15	8	7
1907	45.6	92	10	3.49	6.66	1.42	6.1	8	8	14
1908	54.8	92	18	4.30	8.02	0.77	0.3	13	8	9
1909	53.0	93	10	5.04	8.57	1.70	2.4	10	11	9
1910	53.2	91	16	3.39	9.07	1.63	0.6	10	8	12
1911	49.5	88	6	4.29	7.00	0.83	1.5	9	8	13
1912	55.4	88	20	4.03	8.00	1.09	0.2	11	10	9
1913	52.4	92	12	2.99	5.48	1.61	0.1	14	6	10
1914	52.1	93	16	4.63	10.05	1.29	0.2	10	9	11
1915	55.5	101	10	1.93	5.69	0.10	T.	15	8	7
1916	50.5	90	17	3.07	5.70	1.25	4.3	9	7	14
1917	51.7	90	10	2.99	5.31	1.29	1.8	13	8	9
Means and extremes	51.8	101	2	3.47	10.70	0.10	2.1	11	8	11

Climatological Data for April, 1917.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	46.0	−0.9	79	20	15	9	37	3.04	−1.03	0.60	12.0	14	4	8	18	w.	G. C. Dixon.
Brandywine	Pendleton		0	51.3		85	20	21	14	50	2.08		0.83	T.	6	17	6	7	n.	Elmer Keister.
Burlington	Mineral	875	22	51.4	+0.6	86	20	23	14	42	2.62	−0.01	1.53	1.0	6	7	18	5	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27								2.50	−0.41	1.15	3.0	6				e.	S. W. Lightner.
Martinsburg	Berkeley	435	24	52.8	+1.3	85	1†	26	9	44	2.53	−0.43		3.3	8	14	12	4	ne.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	54.2	+2.1	90	19†	22	14	47	2.27	−0.54	1.45	T.	5	23	5	2		M. S. Henkel.
Piedmont	Mineral	919	0	51.1		87	20	23	9	38	2.53		1.20	0	10	12	14	4	se.	C. A. Suter, Jr.
Romney	Hampshire	824	19	47.6	−3.9	85	1	20	9	34	3.53	+0.88	1.47	0	10	7	16	7	w.	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	54.1[a]	+2.8	86[a]	20	21[a]	14	45[a]	2.21	−0.13	0.75	0	5	21	0	9	w.	J. M. Mallow.
Averages and	extremes			51.1	+0.3	90	19†	15	9	50	2.59	−0.24	1.53	2.1	8	13	10	7	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	52.8	+0.5	86	20	26	9†	42	4.97	+0.97	1.40	2.0	13	17	5	8		J. D. Riggs.
Brandonville	Preston	1,809	6								2.46		0.96		6					W. T. Miller.
Buckhannon	Upshur	1,411	20	52.0	+1.0	83	19	22	10	42	3.16	−1.19	1.40	2.0	7	16	5	9		H. A. Darnall.
Cairo	Ritchie	674	14																	Van A. Zevely.
Central Station	Doddridge	950	19																	D. H. Doak.
Cheat Bridge	Randolph	3,600	4																	Walter Cole.
Cortland	Tucker	3,300	1								2.12		0.70	7.0	5					Samuel Harmon
Creston	Wirt	701	15	53.6	+0.7	89	20	21	10	46	4.79	+0.84	1.63	0	13	8	7	15	sw.	J. M. Reed.
Davis	Tucker	3,093	8								2.92		1.20	12.5	9	11	4	15	w.	Ross C. Male.
Elizabeth	Wirt	646	5								4.55		1.50		12					E. D. Ball.
Elkins	Randolph	1,940	16	49.2	+0.5	84	20	21	9	44	2.72	−0.57	0.61	2.7	13	4	11	15	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	51.6	−0.6	86	19†	22	9†	46	2.83	−0.68	0.82	T.	12	17	3	10	w.	F. P. Hall.
Glenville	Gilmer	738	23	55.3	+2.2	90	20	20	10	49	2.77	−0.96	1.32	0	7	14	11	5	w.	M. T. Brannon.
Grafton	Taylor	1,000	24	49.7	−1.9	78	19	19	10	44	2.90	−0.84	0.96		8	16	4	10	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	51.7	+1.7	85	20	18	10	46	2.73	−0.70	1.09	2.0	9	14	8	8	w.	Allen Smith.
Mannington	Marion	974	14	50.9	−0.5	83	19	19	9	47	3.31	−0.73	0.79	2.0	14	7	10	13	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	50.4[f]	−1.0	83	19	17[f]	9	41[f]	1.29	−2.14	0.27	T.	9	15	1	14	sw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	14	54.1	+1.9	90	19†	21	10	44	3.01	−0.10		1.1		10	9	11	w.	M. Z. White.
New Cumberland	Hancock	987	19	48.6	−0.8	85	19	21	9†	49	2.07	−1.46	0.78	1.0	7	3	19	8	nw.	M. F. Smith.
New Martinsville	Wetzel	634	23	53.6	+0.4	86	20	23	10	45	4.58	+1.03	1.25	T.	12	15	7	8	n.	Wm. Ankrom.
Parkersburg	Wood	638	28	52.6	−0.5	86	20	26	14	40	4.29	+1.38	1.66	0.2	11	9	12	9	nw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	48.9	−3.2	82	19	18	10	46	2.39	−1.51	0.90	4.0	5	12	11	7		J. W. Swisher.
Philippi	Barbour	1,149	20	52.5	+1.2	86	20	18	9	50	2.60	−1.34	0.90	0.5	8	12	15	3	w.	Okey J. Robinson.
Pickens	Randolph	2,697	14	46.7[d]	−1.8	86	20	13[d]	8†	55[d]	4.20	−0.88	1.50	17.0	12	15	7	8	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30								2.92		1.04		10					J. F. Pierce.
Saint Marys	Pleasants	577	8								5.31		2.35		13				w.	Wm. Hughes.
Smithfield	Wetzel	835	11	51.0	−0.7	87	19	19	10	49	3.81	−0.01	1.40	1.5	14	15	9	6	nw.	G. M. Whisler.
Terra Alta	Preston	2,612	16	46.2	−1.4	79	20	15	9	34	3.07	−0.90	0.65	8.0	11	13	7	10	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	50.6	+1.8	79	20	20	9	37	1.84	−1.26	0.45	1.0	10	7	14	9	w	C. P. Waugh.
Weston	Lewis	1,026	21	53.4	+0.8	84	20	23	10	47	3.00	−1.07	1.00	0	9	13	7	10		Weston State Hospital.
Wheeling	Ohio	645	30	52.2		88	19†	23	9	47	3.22	+0.11	0.87	1.0	15	13	2	15	n.	Miss M. B. Forsyth.
Averages and	extremes			51.3	0	90	19†	13	8†	55	3.17	−0.55	2.35	2.8	10	12	8	10	w.	
Southern Division.																				
Bancroft	Putnam	574	12	52.9	−0.7	89	20	22	10	47	2.82	−1.01	0.98	0	8	23	1	6	n.	R. E. Dent.
Beckley	Raleigh	2,440	16	53.0	+3.7	83	19	24	10†	50	3.48	−0.54	1.24	0	7	14	5	11	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	54.2[c]	+0.6	80[c]	19	26[c]	9†	....	1.72	−1.69	0.65		5	17[c]	2[c]	6[c]	....	Norfolk & Western Ry
Camden-on-Gauley	Webster	2,062	1								3.47		0.85	11.0	9	16	0	14	n.	C. A. Brodly.
Charleston	Kanawha	597	13	57.2	+0.4	90	20	25	10	45	3.12	−0.52	1.30	0	9	15	6	9	w.	C. V. Lewis.
Clay	Clay	706	0	53.4		86	20	25	14	45	2.86		1.21	T.	4	17	12	1		Prof. E. H. Knabenshue
Cuba	Jackson	650	14	51.6	−1.1	88	20	10	10†	56	5.23	+1.99	1.19	T.	13	6	18	6	w.	C. T. Perry.
Dam 19 O. R.		557	0								3.91		1.57	T.	13					Lockmaster.
Dam 22 O. R.	Jackson	538	1								4.39		1.00	0	13				w.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0								2.03		0.60	0	8					U. S. Engineer Office.
Dunlow	Wayne	703	8																	James W. Damron.
Elkhorn††	McDowell	1,933	23	51.8	−1.4	79	24	23	10	40	2.01	−1.59	0.58	0.8	8	17	5	8	w.	J. J. Lincoln.
Evans	Jackson	606	0	54.4		84	19	26	10	58	3.29		0.83	T.	13	12	3	15		B. F. Sayre.
Green Sulphur Spgs.	Summers	1,600	20																	W. H. Gwinn.
Hinton	..do	1,450	19	53.0	−0.3	85	19†	25	10	46	2.10	−1.66	0.52	T	11	15	2	13	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	24	49.7		82	19	20	10†	47	2.62		1.16	6.0	6	14	9	7		R. C. Ferguson.
Huntington	Cabell	538	0	55.1	+1.1	89	19	26	9	46	2.58	−1.09	0.90	T.	8	16	1	13		L. H. Hutchinson.
Kayford	Kanawha	1,335	0								3.24		1.03	1.0	9					Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	16	51.8	+1.7	83	19†	19	14	45	2.13	−1.05	0.89	T.	7	14	10	6	nw.	Geo. T. Argabate.
Logan	Logan	687	13																	Agent C. & O. Ry.
Madison	Boone	704	10																	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	45.8	−1.6	78	20	20	4†	42	2.70	−0.41	0.74	T.	11	4	15	11	w.	S. L. Brown.
Nuttallburg	Fayette	2,252	23	48.4	−3.2	78		21	16		1.83	−1.47	0.75	4.0						Miss Donna Tully.
Point Pleasant	Mason	553	23	53.8	−1.1	89	20	21	14	47	3.14	−0.14	0.82	0	13	12	3	15	sw.	W. D. Holmes.
Powelton	Fayette	933	20	56.1	+1.8	89	20	21	17	59	2.30	−1.40	1.20	0	4	19	7	4		S. C. Lampert.
Rainelle	Kanawha	2,425	0								2.88		1.70		8					A. L. Guthrie.
Raleigh	Beckley	2,130	0								2.35		0.56	2.0	8					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	0								3.51		0.81	0.2	7				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	16	53.0	−0.1	87	20	23	10	55	2.82	−0.96	1.00	0	7	12	3	15		E. C. Brace, Jr.
Ryan	Roane	700	13	51.6[a]	−1.0	87	20	20[a]	10	47[a]	3.45	0.37	1.08	0.1	13	11	13	6		Wm. E. Ryan.
Sissonville	Kanawha	625	0								2.84		1.35	0	4					J. N. Johnson.
Spencer	Roane	784	12					18	9							22	2	6		A. M. McKown.
Sutton	Braxton	839	10																	C. B. Eakle.
Union	Monroe	2,250	12	47.2[a]	−3.7	77[a]	29	24	13†	47[a]	2.00	−1.00	0.55	T.	5					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	52.9		86	19	23	11†	50	2.55		1.25	T.	7	22	5	3	nw	J. M. Ayres.
Williamson	Mingo	660	16	56.2	+0.9	87	19†	25	10	45	3.04	−0.94	1.12	0	10	21	4	5	w.	J. F. Keyser.
Averages and	extremes			52.5	−0.2	90	20	10	10†	59	2.95	−0.64	1.70	0.9	9	15	6	9	w.	
State averages and	extremes			51.7	0	90	19†	10	10†	59	2.99	−0.53	2.35	1.8	9	13	8	9	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

c Approximated by the observer.

Daily Precipitation for April, 1917.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac		.09			.60	.60	.30	.10	.20			T.	T.	T.	T.			.01	.14		.03			.17	T.	.11	.21	.27	.21			3.04
Brandywine	do					.83	.15		T.					.27						.07		T.			T.			T.	.34	.42			2.08
Burlington	do		T.			1.53	T.		.10											T.		T			.12		.25	.35	T.	.27			2.62
Harpers Ferry ‖‖	do					.40	1.15			.60											T.		T.		.10		.15			.10			2.50
Martinsburg	do					*	1.72		.33					T.						.05		.06			T.		.29	.05		.03			2.53
Moorefield	do					1.45			.05										.12							.05			.60				2.27
Piedmont	do					1.20	.33		.10	.05									.04		T.	T.			.22		.14	.11	.06	.28			2.53
Romney	do		.40			.61	1.47							T.						.07		.04			.14		.12	.24	.24	.20			3.53
Upper Tract	do					.75	.30		T.	T				.10												T.			.50	.56			2.21
Northern Division.																																	
Bens Run	Ohio		.37			1.01	1.40		.15	.09									.30						.25	.43	.28	.35	.07	.19	.08		4.97
Brandonville ‖‖	Monongahela						.96												.36						.43	.21		.14	.36				2.46
Buckhannon	do		T.			T.	1.40	.20	T.	.05			T.					.35			T.			T.	T.		.54	.26	.36			3.16
Cairo	Little Kanawha																																
Central Station	Middle Is. Creek																																
Cheat Bridge ‖‖																																	
Cortland	Monongahela					.33	.70											.54										.32		.23		2.12
Creston ‖‖	Little Kanawha		.20	.30		.20	1.65	.54		.15				T.					.20	.02	T.		.25		.21		.45		.23	.41	T.		4.79
Davis ‖‖	Monongahela			T.		.10	.40	1.20	.15		T.			T.					.15	T.						.07	.10		.40	.35			2.92
Elizabeth ‖‖	Little Kanawha		.40	.03		.45	1.50	.28		.20									.25						.18		.58		.36	.28	.04		4.55
Elkins ***	Monongahela		.13	T.		.58	.43	.01	.02	.04			T.	.02	T.	T.			.24			T.			.04	.17		.41	.47	.16	T.		2.72
Fairmont ‖‖	do		.08	.04		.28	.82	.08		.15				T.					.15		.20	T.	T.		T.	.13	.34		.35	.21	T.		2.83
Glenville ‖‖	Little Kanawha			.20	T.	T.	1.32	.43		.11															.28		.12		.31				2.77
Grafton	Monongahela		.10			.48	.96		.17																.36		.23	.39		.21			2.90
Lost Creek	do		.07			.68	1.09	T.	T.	.02									.40			T.			.03	T.		.22	.10	.12			2.73
Mannington	do		.16			.67	.79	T.	.13	.02									.17	.16		.01			.20	.07	.36	.20	.15	.22			3.31
Morgantown	do		.07			.18	.21		.05				T.							T.					.27	.01		.16	.13	.21	T.		1.29
Moundsville	Ohio	*	*			.50	.60		.11										T.			.20		*	.70	*	.90	T.					3.01
New Cumberland	do	T.	.20			.78	.22		.10				T.	T.						.49	T.	.09				.19				T.	T.		2.07
New Martinsville	do		.30			1.10	1.20		T.	.12									.15			.10			.32	.12	.65	.20	.12	.15			4.58
Parkersburg ***	Ohio	T.	.43			1.57	.28		.07							T.			.19			.08		T.	.23	.49		.44	.18	T.	.33		4.29
Parsons	Monongahela		T.			T.	.90						T.	T	.48		T.				.06				.20			.75					2.39
Philippi	do					.60			.05										.90							.05		.10	.42	.23	.25		2.60
Pickens	do		*	.23		.84	1.50		T.	.10				.25				.12							.10	.12	T.	11	.13	.70			4.20
Rowlesburg ‖‖	do			.05		.30	1.04	.40		.16									.04	T.	T.					.09	.16		.46	.22			2.92
Saint Marys ‖‖	Ohio		.35	.05		.34	2.35	.25		.10									.30	T.		.08			.07	.10	.75	T.	.40	.17			5.31
Smithfield	Fishing Creek		.25	.05		.20	1.40	.24		.13									.30		.02		.02		.06	.15	.38		.39	.22			3.81
Terra Alta	Monongahela		.08			.65	.60		.20										.05	.17					.28		.35	.25	.18	.26			3.07
Wellsburg	Ohio		.28			.28	.07		.05	.05										.20		.05			.30	.11	.45	T.					1.84
Weston	Monongahela		.10			.50	1.00	.15											.25						.05		.40	.30		.25			3.00
Wheeling ‖‖	Ohio		.16	.16		.20	.87	.10		.20						T.	.01		.01	.26		.06	T.		.30	.30	.50		.06	.03			3.22
Southern Division.																																	
Bancroft ‖‖	Great Kanawha		.33	.05		.29	.98	.40						.10													.05			.62			2.82
Beckley	do			.06	.58		.02	.33						.28											1.24						.97		3.48
Bluefield	do					.65																.20							.32		.20	.35		1.72
Camden-on-Gauley	do		.72			.85	.50	.40	.20					.20					.25						.25			.10					3.47
Charleston ‖‖	do		.15	T.		.25	1.40	.10		.12				.12													.12		.06	.80			3.12
Clay	do			.21		.32	1.21		T	T.				T.					T.			T.						T.	T.	1.12			2.86
Cuba	Sand Creek		.52			1.19	.65		.10										1.05			.05			.21	.55	.20	.25	.05	.30	.11		5.23
Dam 19 O. R. ‖‖	Ohio		.42	.03		.40	1.57	.15		.11						T.	T.		.18			.07			.20	.03	.10		.55	.10			3.91
Dam 22 O. R. ‖‖	do		.44	.02		.33	1.00	.05		.09									.71	.40		.02			.23		.44		.21	.45			4.39
Dam 26 O. R. ‖‖	do		.35	.07		.35	.60	.04		.06												T.								.42	.14		2.03
Dunlow	Big Sandy																																
Elkhorn	do	.03				.51	.24		.01					.29								T.					.28		.05		.58		2.01
Evans	Ohio		.32			.83	.77		.15	.03									.19			T.	T.		.02	.08	.25	.14	.03	.39	.09		3.29
Green Sulphur Spgs.	Great Kanawha																																
Hinton ‖‖	do			.04		.52	.42	.04		.06				.20	.06						.04		.02				.24			.46			2.10
Holcomb	do	.18	T.				1.16			T.				.18					T.							.43			*	.67			2.62
Huntington ‖‖	Ohio	.36	.06			.40	.90			.10				.24								.04					T.			.48			2.58
Kaycord	Great Kanawha		.25			.25	.75	.40		T.				.23	.10								.05				.20			1.03			3.24
Lewisburg	do					.89	.15		T.					.25					T.			.08			.24			.16	.36			2.13
Logan	Guyandotte																														T.		
Madison ‖‖	Great Kanawha																																
Marlinton	do	.02				.58	.18		.12	T.				.26					.06			.02				.14	.32	T.	.26	.74			2.70
Nuttallburg	do	*	*	*	*	.32	.20			T.										*	*	*	*			.26				.75	.30		1.83
Point Pleasant ‖‖	Ohio	.43	.13			.38	.82	.04		.14									.05			.08			.04		.40		.17	.42	.04		3.14
Powellton							1.20			.05				.30																.75			2.30
Rainelle	Great Kanawha	1.	.04			.10	1.00	T.	.01	T.									.01			.02	T						.70	1.00	T.		2.88
Raleigh ‖‖	do	.16	T.			.34	.52	.24		T.				.20	T.					.05							.28			.56			2.35
Renick ‖‖	do	T.	.02			.44	.81							T.	.30												.60			.80	.54		3.51
Robertsburg ‖‖	do	.24				.47	1.00			.10				.14														T.		.25	.62			2.82
Ryan	do	.16				1.08	.81		.08	.01									.34			T.			.01	.03	.08	.10	.06	.56	.13		3.45
Sissonville ‖‖	do	.20		.34			1.35						T.						T.							T			.95	T.			2.84
Spencer ‖‖	Little Kanawha																																
Sutton	Great Kanawha																																
Union ‖‖	do					.55	T.					.50							.10						.45				.40			2.00
White Sulphur Spgs.	do					1.25	T.	T.	T.	.05				.40					.05						.30		.20	.30				2.55
Williamson ‖‖	Big Sandy	.24	.02			.32	.92			.02				.15	T.								.02		.23			1.10	.02			3.04

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for April, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	73	66	49	55	45	33	40	37	29	43	63	59	52	41	45	51	69	72	75	79	72	66	71	67	62	62	52	45	58	76	....	56.9
	Minimum	56	43	31	23	32	28	28	20	15	19	32	41	25	20	25	30	32	45	60	48	52	40	38	42	36	36	34	35	38	46	....	35.0
Brandywine	Maximum	80	75	58	60	54	40	52	50	38	53	75	70	65	54	55	65	77	79	84	85	82	73	78	71	65	75	65	54	55	81	....	65.6
	Minimum	42	53	39	22	40	35	34	25	28	26	25	39	35	21	26	25	33	43	45	46	47	40	35	50	44	47	36	42	43	45	....	37.0
Burlington	Maximum	83	76	74	62	52	45	50	42	38	51	71	72	60	50	53	63	74	80	85	86	77	73	79	65	60	73	64	54	59	77	....	64.9
	Minimum	44	48	35	25	35	34	37	26	25	29	29	56	33	23	25	27	32	44	51	53	50	42	38	44	41	41	36	44	46	44	....	37.9
Martinsburg§	Maximum	85	77	60	62	47	45	55	44	44	52	75	73	51	51	56	66	71	82	85	77	81	76	83	69	55	65	65	63	68	78	....	65.4
	Minimum	44	58	42	32	35	38	38	31	26	27	33	40	41	28	29	31	36	38	51	53	54	51	45	47	41	38	40	45	45	47	....	40.1
Moorefield	Maximum	85	79	63	65	60	46	55	53	43	57	77	75	66	59	57	70	76	84	90	90	82	78	85	81	64	77	69	54	62	84	....	69.5
	Minimum	46	55	42	25	25	29	37	28	29	28	30	55	36	22	26	30	33	47	53	51	49	42	38	46	43	47	39	44	45	47	....	38.9
Piedmont	Maximum	80	75	57	61	57	41	49	47	37	50	71	67	61	49	52	63	71	79	83	87	72	74	79	65	57	69	63	55	57	77	....	63.5
	Minimum	44	51	39	27	37	32	34	28	23	28	33	41	35	28	31	27	35	46	53	53	52	46	41	44	38	45	37	41	46	47	....	38.7
Romney	Maximum	85	76	55	54	47	40	40	38	30	45	68	58	53	41	42	55	63	71	75	76	69	70	71	68	48	62	54	45	45	68	....	57.1
	Minimum	51	47	40	26	33	33	33	26	20	24	34	52	29	27	26	28	33	40	57	55	50	50	41	38	40	44	35	39	44	45	....	38.0
Upper Tract	Maximum	80	78	75	70	67	60	56	55	49	50	72	70	65	60	60	68	76	78	84	86	83	79	78	73	65	70	....	66	67	80	....	69.7
	Minimum	52	58	39	25	37	33	33	27	28	28	32	43	35	21	29	27	33	43	46	48	50	42	37	50	42	48	....	48	37	45	....	38.5
Northern Division.																																	
Bens Run	Maximum	80	76	59	66	60	50	53	40	43	55	71	64	54	45	54	62	78	80	85	86	72	74	79	63	79	65	53	59	72	72	....	65.0
	Minimum	57	42	36	34	39	34	38	31	26	26	29	51	34	26	29	29	39	50	55	56	49	41	44	47	45	46	41	42	48	50	....	40.5
Buckhannon	Maximum	75	73	53	55	56	48	49	46	38	46	69	67	60	42	59	75	76	82	83	70	65	59	74	72	77	68	57	52	75	75	....	63.2
	Minimum	50	47	39	40	44	33	33	31	24	22	27	40	33	28	28	34	49	52	65	59	49	44	39	41	45	47	38	44	49	49	....	40.8
Creston	Maximum	80	77	69	70	64	52	53	50	41	55	72	69	65	48	55	62	80	84	87	89	73	78	81	72	79	68	57	53	77	77	....	67.9
	Minimum	48	52	32	39	34	32	33	32	27	21	26	37	37	22	30	29	40	48	49	54	56	41	40	53	43	46	40	43	47	46	....	39.2
Elkins	Maximum	79	74	53	63	50	36	46	44	33	48	69	64	46	45	48	58	74	75	82	84	68	68	75	65	65	66	54	59	72	76	....	61.3
	Minimum	59	40	30	25	36	32	29	27	21	23	25	46	25	23	26	26	32	49	49	52	49	44	36	46	43	41	35	42	46	52	....	37.0
Fairmont§	Maximum	79	71	59	67	52	39	53	41	42	59	73	66	43	51	52	65	74	82	86	86	68	76	81	54	77	67	58	54	75	75	....	64.2
	Minimum	43	57	37	31	38	33	33	31	22	22	27	31	33	29	27	27	33	43	54	58	57	46	41	51	46	47	38	42	44	50	....	39.0
Glenville§	Maximum	83	80	64	71	65	52	58	68	42	58	75	73	70	51	55	66	85	84	88	90	89	78	84	80	82	71	71	57	79	81	....	71.7
	Minimum	49	52	39	29	45	34	35	31	26	20	26	38	38	21	29	21	36	46	50	54	57	39	37	54	41	41	37	44	49	48	....	38.9
Grafton	Maximum	75	56	54	62	62	47	52	52	38	53	68	68	68	39	49	63	65	70	78	77	72	68	67	67	64	64	55	52	75	75	....	61.8
	Minimum	42	52	41	26	45	32	35	29	23	19	24	24	33	29	25	27	33	33	52	51	52	42	41	47	46	47	37	42	48	52	....	37.6
Lost Creek	Maximum	78	72	58	64	59	48	53	41	40	54	69	65	60	48	54	60	73	79	84	85	70	75	80	71	78	67	59	51	72	74	....	64.7
	Minimum	55	46	38	26	44	32	32	31	23	18	23	43	34	20	25	25	31	60	50	53	56	55	36	49	41	44	34	42	47	48	....	38.7
Mannington	Maximum	77	75	54	64	60	46	50	47	38	52	71	67	61	40	52	61	73	78	83	82	82	72	78	69	76	66	57	53	72	71	....	64.2
	Minimum	48	46	34	27	44	33	36	30	19	20	24	46	33	24	24	25	32	45	50	53	52	40	38	46	43	45	35	42	47	46	....	37.6
Morgantown	Maximum	77	74	54	65	56	42	50	44	37	58	70	65	61	41	51	61	72	79	83	82	76	72	77	62	68	66	57	56	72	73	....	63.4
	Minimum	62	43	....	48	41	32	32	27	17	23	29	51	30	26	26	27	35	48	51	....	....	....	....	....	29	50	38	41	45	49	....	37.5
New Cumberland	Maximum	62	62	55	63	59	42	38	38	35	53	72	65	50	37	46	59	65	82	85	81	78	74	74	57	65	59	56	60	59	65	....	59.9
	Minimum	57	37	29	28	42	33	33	29	21	21	23	50	30	28	25	21	32	51	48	61	49	40	47	44	36	40	36	33	44	48	....	37.2
New Martinsville	Maximum	80	75	65	66	60	52	52	49	43	55	72	67	62	48	55	64	78	82	85	86	80	75	80	68	80	68	55	56	72	71	....	66.7
	Minimum	60	43	34	32	45	34	37	32	27	23	27	48	38	28	27	28	36	56	53	57	55	41	42	46	44	45	38	42	48	50	....	40.5
Parkersburg	Maximum	79	66	55	65	57	41	51	41	40	54	72	65	44	43	54	59	77	82	85	86	73	73	79	59	77	64	52	54	73	72	....	63.1
	Minimum	63	42	38	40	39	37	37	31	27	27	32	44	31	26	31	33	44	53	58	64	50	44	46	47	47	44	43	49	49	49	....	42.1
Parsons	Maximum	77	72	54	63	53	40	45	42	32	51	68	65	57	50	60	76	70	81	82	67	69	75	66	63	66	57	55	70	70	75	....	62.4
	Minimum	40	47	37	23	39	31	32	25	21	18	22	33	27	22	25	40	28	41	48	45	41	33	38	48	47	33	40	44	43	50	....	35.4
Philippi	Maximum	80	74	80	78	80	70	60	50	40	55	70	66	62	48	53	62	67	78	80	86	82	76	77	66	70	73	56	54	75	73	....	68.0
	Minimum	65	42	34	38	30	40	37	29	18	20	30	45	29	22	23	24	32	45	50	50	46	39	40	39	40	42	36	36	42	48	....	37.0
Pickens	Maximum	78	68	57	65	49	33	57	43	32	54	68	62	50	51	52	62	79	72	84	86	64	79	80	67	72	71	51	58	80	77	....	63.4
	Minimum	42	30	20	18	25	17	20	13	15	13	13	27	15	21	32	28	....	....	....	....	47	37	40	47	47	40	33	44	47	48	....	30.0
Terra Alta	Maximum	73	69	51	57	51	35	41	35	29	44	60	60	54	41	45	56	58	74	77	79	73	67	73	59	56	61	51	46	61	70	....	56.9
	Minimum	54	43	30	31	33	28	28	24	15	20	29	47	25	20	24	25	30	49	51	51	52	40	39	43	36	42	34	35	40	46	....	35.5
Wellsburg	Maximum	74	67	52	61	55	43	45	39	34	48	66	61	49	35	47	56	66	76	78	79	75	68	72	60	64	59	53	68	66	63	....	59.3
	Minimum	58	38	32	35	43	33	33	27	20	25	29	49	31	26	28	27	51	62	67	67	57	57	57	48	48	46	38	35	46	48	....	42.0
Weston	Maximum	78	77	57	65	63	53	52	50	40	54	75	70	64	48	52	60	77	78	83	84	75	72	78	74	76	68	53	65	75	77	....	66.4
	Minimum	53	50	40	31	45	33	35	32	25	23	28	43	35	24	30	29	36	48	53	56	57	42	41	52	42	39	42	48	48	50	....	40.3
Wheeling§	Maximum	80	66	62	67	54	41	55	41	50	58	75	70	43	45	54	62	76	86	88	88	70	78	82	63	78	65	58	64	68	70	....	65.2
	Minimum	54	58	33	33	42	34	35	34	23	24	28	29	34	29	28	26	29	43	51	58	55	41	43	47	43	45	40	39	44	50	....	39.1
Southern Division.																																	
Beckley	Maximum	76	74	60	62	59	54	53	54	42	55	78	77	72	48	62	68	76	82	83	72	74	78	80	74	68	69	71	74	78	79	....	68.4
	Minimum	46	52	36	32	41	33	34	31	25	24	28	35	35	24	26	29	35	46	48	37	39	39	39	48	43	43	44	48	46	45	....	37.7
Bluefield	Maximum	....	75	55	55	50	46	54	....	54	54	70	67	67	50	....	65	78	79	80	79	77	....	....	76	72	79	72	74	63	79	....	66.8
	Minimum	....	54	36	40	38	30	32	....	26	27	31	42	40	26	....	30	43	51	50	61	55	....	....	40	48	49	43	49	49	48	....	41.5
Charleston	Maximum	84	80	75	70	69	60	60	55	52	60	75	75	72	67	62	65	82	85	89	90	86	85	84	80	82	79	77	74	75	80	....	74.3
	Minimum	42	52	41	36	38	33	35	35	29	25	30	37	31	27	31	32	38	42	52	55	61	43	42	47	49	50	46	46	39	40	....	40.1
Elkhorn	Maximum	70	70	52	52	52	42	49	49	37	50	67	67	66	46	52	62	75	76	76	76	75	67	77	79	78	69	74	73	73	75	....	64.2
	Minimum	44	51	34	36	38	28	29	32	24	23	27	34	35	24	25	32	41	44	47	53	56	37	40	47	52	49	44	52	54	48	....	39.3
Green Sulphur Spgs.	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hinton§	Maximum	75	80	58	51	50	40	55	49	41	57	73	75	50	54	58	68	80	82	85	85	70	73	80	82	68	72	68	78	73	83	....	67.1
	Minimum	35	38	40	32	35	35	35	32	29	25	27	32	40	27	27	30	40	42	46	52	52	41	40	43	51	51	44	48	50	49	....	38.9
Holcomb§	Maximum	80	72	56	61	61	36	52	48	48	53	69	68	46	48	51	60	79	78	82	64	66	71	77	76	65	69	60	68	76	80	....	64.0
	Minimum	33	38	35	28	40	31	31	28	24	20	25	30	35	20	21	24	36	42	44	48	46	34	40	43	50	47	34	43	44	47	....	35.4
Huntington§	Maximum	80	63	58	68	60	43	58	41	46	60	73	74	52	54	61	61	85	88	89	87	70	77	84	75	83	72	67	58	80	76	....	68.1
	Minimum	58	57	37	38	41	35	32	36	26	27	31	37	37	28	31	36	39	49	55	58	55	40	44	52	49	51	46	45	47	47	....	42.1
Lewisburg	Maximum	77	74	59	59	52	45	53	47	37	53	71	71	66	51	53	65	78	79	83	83	75	74	78	75	69	67	70	72	64	79	....	66.0
	Minimum	42	50	37	27	39	32	33	29	26	26	26	37	39	19	25	27	40	44	45	50	49	37	38	43	47	39	46	45	46	43	....	37.5
Madison§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Marlinton	Maximum	72	68	50	54	44	40	44	40	32	46	64	62	56	50	46	56	70	70	76	78	66	68	70	68	56	62	58	60	66	72	....	58.8
	Minimum	32	42	30	20	32	30	28	24	28	22	22	28	32	22	20	22	38	40	40	44	44	34	32	36	42	44	32	42	38	40	....	32.7
Point Pleasant	Maximum	81	71	59	68	63	48	56	53	45	59	74	72	65	52	60	60	83	87	88	89	83	76	84	75	82	74	59	57	75	75	....	69.1
	Minimum	57	40	32	36	43	34	29	30	24	24	27	39	34	21	28	28	40	51	50	59	52	36	40	50	41	44	41	40	45	41	....	38.5
Powellton	Maximum	83	65	55	64	62	56	57	54	55	57	73	74	71	51	59	66	80	85	87	89	85	75	81	80	74	73	75	79	83	84	....	71.1
	Minimum	48	42	38	34	36	35	38	33	30	26	30	39	38	27	29	32	21	45	51	57	59	41	42	50	51	51	55	54	57	45	....	41.1
Robertsburg§	Maximum	81	65	61	68	60	42	56	42	41	57	57	70	50	52	57	60	85	85	86	87	68	77	82	73	83	68	55	57	76	78	....	66.0
	Minimum	49	56	38	37	45	36	32	36	28	23	31	37	37	24	30	30	30	38	52	57	55	38	40	52	45	43	44	45	47	46	....	40.0
Ryan	Maximum	80	68	60	59	59	44	53	41	38	50	72	71	59	45	54	61	80	83	86	87	72	70	80	70	72	65	55	53	78	77	....	64.7
	Minimum	52	46	34	30	44	32	30	32	27	20	25	33	36	21	35	27	41	47	49	53	53	36	43	52	46	43	38	44	47	....	....	38.5
Spencer§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	43	45	41	45	45	43	41	46	18	19	24	35	37	36	32	30	35	32	37	40	34	35	50	42	43	44	40	43	45	37	....	37.9
Union§	Maximum	68	59	60	60	40	56	53	57	55	70	72	52	55	60	62	63	64	63	60	58	59	70	56	69	73	76	77	....	....	....	....	61.6
	Minimum	45	40	35	40	35	32	32	35	32	25	25	33	24	29	30	32	31	32	34	29	32	30	27	30	24	30	39	40	41	43	....	32.9
White Sulphur Spgs.	Maximum	80	76	65	68	55	58	56	52	42	57	73	73	73	55	58	67	81	81	86	85	81	75	79	79	73	72	68	70	70	81	....	69.6
	Minimum	39	48	39	25	32	35	43	27	30	25	23	30	43	23	25	25	39	41	42	46	47	37	35	41	40	45	37	44	40	41	....	36.2
Williamson§	Maximum	82	71	61	67	61	43	60	55	47	61	74	75	51	55	63	70	84	85	87	87	71	76	82	83	84	73	71	63	81	83	....	70.2
	Minimum	39	50	41	37	40	32	32	33	30	28	29	35	41	30	31	38	42	45	53	55	62	45	45	45	50	53	49	50	51	52	....	42.1

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches
6 to 8 inches.
Over 8 inches
F

1.05
HWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MAY, 1917

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JUNE 25, 1917

Departure of the Mean Temperature from the Normal, May, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXV. PARKERSBURG, W. VA., MAY, 1917. No. 5.

GENERAL SUMMARY.

The past month, with an average temperature of 55.5°, or 6.7° below the normal, was the coolest May of record. Other cool Mays occurred in 1891, 1897, 1910, when the average temperatures were 57.2°, 57.6°, and 57.9°, respectively. Freezing temperatures and heavy to killing frosts occurred in most sections at the close of the first decade, and freezing temperatures and heavy frosts were noted in many of the more elevated localities on the 26th. The rainfall was light and the conditions generally droughty until the 26th, when excessive rains occurred, making the average fall for the month much above the normal. While only slight damage resulted from frosts, owing to the lateness of the season, the cool weather greatly retarded all growth. Many fields were also badly washed by the excessive rains, and crops in many sections were ruined on bottom lands by flooded streams. At the close of the month corn and gardens were especially late and generally poor, but wheat, rye, oats, potatoes, apples, small fruits, berries, and meadows were generally in good condition. The peach outlook was fair to poor.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 29.93 and 29.91 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.21 inches on the 30th, and 29.43 inches on the 22d. Elkins, 30.27 inches on the 30th, and 29.44 inches on the 22d.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 55.5°. The mean departure from the normal for 36 stations having ten or more years of record was —6.7°. The temperature was below the normal during the first half of the month, the departures from the normal for that period averaging more than 10° a day. Freezing temperatures occurred in many sections on the 10th. Moderately warm weather prevailed from the 17th to the 22d and on the 27th and 31st, while unseasonably cool weather, with freezing temperatures in sections, occurred from the 23d to the 26th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 73 per cent; 8 p. m., 69 per cent. The May averages for the same hours for the last 28 years are 75 and 66 per cent, respectively. Elkins, 8 a. m., 73 per cent; 8 p. m., 62 per cent. The May averages for Elkins for the same hours for the past 17 years are 80 and 65 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 64 stations reporting, was 4.88 inches. The departure from the normal for 45 stations with ten or more years of record was —1.05 inches. Light showers occurred daily in many sections from the 4th to the 9th and on the 11th and 12th. No rain of much consequence fell from the 13th to the 21st and the conditions were generally droughty. Moderate showers occurred on the 21st and 22d and heavy rain fell from late on the 26th until the 29th, the amounts received at many of the stations during that period averaging from four to more than five inches. Flood stages occurred in the Little Kanawha River and the smaller streams were generally exceptionally high for the season.

WIND.

The average wind velocity at Parkersburg was 7.1 miles per hour, or 1.9 miles above the May average for the past 27 years. The average at Elkins was 5.7 miles per hour, or 1.8 miles above the May average for 17 years. The highest velocity at Parkersburg was 30 miles per hour from the northwest on the 26th, and at Elkins 34 miles per hour from the west on the 22d.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 49 per cent of the possible amount, or 6 per cent below the normal as compared with the May average for 19 years. The average at Elkins was 46 per cent, or 9 per cent below the normal as compared with the May average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 10th, 26th, and 30th; Bayard, 6th; Brandywine, 4th, 5th, 6th, and 7th; Creston, 10th; Elkins, 25th; Grafton, 9th; Hinton, 30th; Hogsett, 30th; Holcomb, 7th, 10th, 22d, and 23d; Mannington, 19th, 25th, and 30th; Pickens, 5th and 6th; Rowlesburg, 26th and 30th.

Frost, heavy: Elkins, 26th; Grafton, 3d; Mannington, 26th; Parkersburg, 10th; Robertsburg, 10th; Wellsburg, 30th.

Frost, killing: Bayard, 26th; Buckhannon, 10th, 14th, and 15th; Creston, Glenville, Green Sulphur Springs, and Holcomb, 10th; Mannington, 10th and 14th; Marlinton, 10th and 26th; Morgantown, 26th; New Cumberland, 3d and 10th; New Martinsville, 10th; Pickens, 10th and 26th; Ryan, 10th, 14th, and 26th; Smithfield, 10th.

Hail: Bayard, 9th, 23d, and 28th; Buckhannon, 26th; Burlington, 28th; Clay, 27th; Elkins, 9th and 26th; Glenville, 21st and 23d; Huntington, 25th and 31st; Morgantown, 9th and 29th; New Cumberland, 13th; Nuttallburg, 21st and 26th; Parkersburg, 20th, 26th, and 27th; Pickens, 12th, 20th, and 22d; Robertsburg, 11th and 22d; Ryan, 12th and 27th; Smithfield, 27th.

Halo, lunar: Pickens, 30th.

Halos, solar: Parkersburg, 3d; Wellsburg, 14th and 30th.

Thunderstorms (dates and number of stations reporting): 1st, 10; 4th, 4; 10th, 1; 11th, 2; 12th, 2; 13th, 1; 18th, 1; 20th, 10; 21st, 1; 22d, 13; 23d, 3; 26th, 13; 27th, 21; 28th, 12; 29th, 2; 31st, 6.

COMPARATIVE DATA FOR MAY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	57.2	..	....	3.18	....	....	...	..	..	..
1892	62.2	96	32	5.04	....	....	...	..	..	..
1893	59.5	92	30	4.51	6.41	1.83	....	12	9	10
1894	62.1	100	28	4.44	9.40	2.17	....	16	9	6
1895	61.6	105	20	2.60	6.31	0.79	....	12	11	8
1896	68.3	95	33	3.01	5.92	0.65	....	11	13	7
1897	57.6	90	23	4.60	7.06	2.17	....	13	10	8
1898	63.0	94	28	4.51	6.15	2.76	....	13	10	8
1899	64.1	96	35	5.17	7.68	3.17	....	11	11	9
1900	62.5	98	21	2.99	6.75	0.35	....	14	9	8
1901	61.8	96	21	6.15	8.88	2.50	....	11	10	10
1902	65.2	98	25	3.17	6.09	1.30	....	14	11	6
1903	64.3	95	20	3.03	6.24	0.80	T.	18	9	4
1904	61.8	98	25	3.55	5.80	1.54	T.	12	11	8
1905	64.2	96	26	4.95	7.96	1.90	0	12	10	9
1906	62.7	98	22	2.59	6.89	0.39	T.	15	9	7
1907	59.0	93	24	3.88	6.37	1.38	T.	12	10	9
1908	63.4	96	28	6.19	11.45	2.73	0.1	9	12	10
1909	60.8	93	21	3.82	6.05	1.80	0.1	14	9	8
1910	57.9	96	19	3.92	5.87	1.55	0	11	10	10
1911	66.0	100	22	1.46	6.35	0.03	0	20	8	3
1912	63.3	94	31	3.93	7.50	1.16	0	15	8	8
1913	61.6	95	19	5.16	8.86	1.89	0	14	8	9
1914	62.4	100	24	1.96	3.75	0.55	0	18	8	5
1915	61.1	92	29	4.22	6.85	2.56	0	10	9	12
1916	64.0	97	28	3.58	6.00	0.90	T.	14	9	8
1917	55.5	95	25	4.88	5.45	2.45	T.	11	8	12
Means and extremes	62.0	105	19	3.94	11.45	0.03	T.	13	10	8

Climatological Data for May, 1917.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	50.8	−6.5	79	19†	31	12†	38	5.10	+0.76	2.22	0.2	15	5	5	21	w.	G. C. Dixon.
Brandywine	Pendleton		0	55.4		87	19	31	26	47	2.90		1.27	0	11	17	3	11	s.	Elmer Keister.
Burlington	Mineral	875	22	56.0	−5.6	87	18†	33	26	42	4.24	+0.44	1.70	0	7	5	21	5	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27								2.81	−0.91	0.60	0	10				w.	S. W. Lightner.
Martinsburg	Berkeley	435	24	58.0	−5.3	92	18	37	11†	44	3.21	−0.54	2.09	0	6	19	5	7	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	59.4		95	18	32	10†	46	2.95	−0.67	1.11	0	13	19	5	7		M. S. Benkel.
Piedmont	Mineral	919	0	55.8	−7.3	87	19	34	11	39	3.26		1.11	0	11	14	12	5	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	19																	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	57.1[a]	−4.8	90[a]	18	34[a]	6†	48[a]	3.23	−0.07	1.58	0	7	20	1	10	w.	J. M. Mallow.
Averages and	extremes			56.1	−5.9	95	18	31	12†	48	3.46	−0.16	2.22	T.	10	14	8	9	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	56.6	−7.0	87	19	34	10	38	3.99	−0.46	1.25	0	9	18	5	8		J. D. Riggs.
Brandonville	Preston	1,809	6								4.40		1.49	0	10					W. T. Miller.
Buckhannon	Upshur	1,411	20	55.4	−6.8	84	19	31	10	36	6.40	+2.02	2.25	0	9	12	7	12		H. A. Darnall,
Cairo	Ritchie	674	14																	Van A. Zevely.
Central Station	Doddridge	950	19																	D. H. Doak.
Cheat Bridge	Randolph	3,600	4																	Walter Cole.
Cortland	Tucker	3,300	1								4.30		1.71	0	8					Samuel Harmon
Creston	Wirt	701	15	57.6	−6.0	91	19	30	10	41	6.02	+2.46	1.89	0	11	8	7	16	w.	J. M. Reed.
Davis	Tucker	3,093	8								4.97		2.00	0.5	10	8	6	17	w.	Ross C. Male.
Elizabeth	Wirt	646	5								5.36		2.10	0	6					E. D. Ball.
Elkins	Randolph	1,940	16	53.4	−5.7	84	19	32	26	41	4.35	+0.37	1.86	T.	16	5	9	17	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	56.2	−6.5	88	19	33	10†	39	4.03	+0.03	1.28	0	12	17	4	10	w.	F. P. Hall.
Glenville	Gilmer	738	23	58.6	−4.8	90	19†	30	10	46	6.65	+2.70	2.05	0	12	8	19	4	w.	M. T. Brannon.
Grafton[d]	Taylor	1,000	24	52.8		78	21†	33	11	34	4.60	+0.24	1.53	T.		7	9	11	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	54.6	−6.4	87	19	25	14	40	4.85	+0.74	2.10	0	16	12	9	10	w.	Allen Smith.
Mannington	Marion	974	14	54.8	−6.6	85	18†	30	10	41	4.44	+0.50	1.42	0	12	7	11	13	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	55.2	−7.5	84	19	31	26	45	4.99	+1.40	1.62	0	14	8	5	18	sw.	Prof. Edgar L. Andrews
Moundsville	Marshall	642	14																	M. Z. White.
New Cumberland	Hancock	987	19	53.6	−7.3	86	18	31	3	38	3.06	−0.10	0.89	0	11	5	18	8	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	57.4	−6.4	87	19	31	10	39	3.40	−0.21	1.30	0	12	9	12	10	n.	Wm. Ankrom.
Parkersburg	Wood	638	28	57.6	−5.8	86	19	34	10	30	5.06	+1.60	2.08	0	11	9	9	13	nw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	53.0	−6.4	84	19	29	10†	42	5.13	+1.23	1.95	0	6	9	10	12		J. W. Swisher.
Philippi	Barbour	1,149	20	54.4	−7.5	89	22	32	26	48	6.05	+1.83	2.20	0	10	10	16	5	w.	Okey J. Robinson.
Pickens	Randolph	2,697	14	52.4	−6.6	90	19	29	10	43	7.07	+2.07	3.04	T.	15	15	6	10	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30								7.28	+3.00	2.30	0	12				w.	J. F. Pierce.
Saint Marys	Pleasants	577	8								4.33		1.45	0	11				sw.	Wm. Hughes.
Smithfield	Wetzel	835	11	54.8	−6.7	89	19	30	10	43	4.53	+0.58	1.58	0	14	12	13	6	nw.	G. M. Whisler.
Terra Alta	Preston	2,612	16	50.7	−8.9	80	19	31	3†	38	5.70	+0.66	1.85	T.	13	11	10	10	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	53.4	−7.5	82	19	33	3	32	3.08	−0.38	0.90	0	10	5	16	10	w	C. P. Waugh.
Weston	Lewis	1,026	21	57.2	−6.0	87	19	31	10	38	5.96	+1.71	2.10	0	9	12	9	10		Weston State Hospital.
Wheeling	Ohio	645	30	56.6		91	19	32	10†	43	2.45	−1.01	0.41	0	12	12	6	13	sw.	Miss M. B. Forsyth.
Averages and	extremes			55.1	−6.7	91	19	25	14	48	4.91	+0.95	3.04	T.	11	10	10	11	w.	
Southern Division.																				
Bancroft	Putnam	574	12	56.5	−7.8	89	20	33	10	37	6.31	+2.30	2.90	0	8	19	0	12	ne.	R. E. Dent.
Beckley ††	Raleigh	2,440	16	57.2	−2.8	84	21	38	6†	37	5.09	+1.89	1.88	0	9	11	8	12	w.	John A. Ewart.
Bluefield	Mercer	2,558	21																	Norfolk & Western Ry
Camden-on-Gauley	Webster	2,062	1								8.45		2.00	0	9	7	3	21	s.	C. A. Droddy.
Charleston	Kanawha	597	13	61.3	−5.0	93	19†	37	10	46	5.71	+1.80	2.38	0	10	8	3	20	w.	C. V. Lewis.
Clay	Clay	706	0	57.2		90	20	34	10	36	6.24		3.52	0	4	13	12	6		Prof. E. H. Knabenshue
Cuba	Jackson	650	14			88	18†				4.19	+0.80	2.45	0	12	7	21	3	nw.	C. T. Perry.
Dam 19 O. R.		557	0								5.26		1.80	0	13					Lockmaster.
Dam 22 O. R.	Jackson	538	1								5.44		2.43	0	10				nw.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0								4.02		1.48	0	7					U. S. Engineer Office,
Dunlow	Wayne	703	8																	James W. Damron.
Elkhorn	McDowell	1,933	23																	J. J. Lincoln.
Evans	Jackson	606	0	58.6		86	20	32	10	31	5.27		2.88	0	11	5	6	20		B. F. Sayre,
Green Sulphur Spgs[a]	Summers	1,600	20	56.0	−5.8	87	19†	32	10	35	5.06	+1.65	1.70	0	10	13	4	13	w.	W. H. Gwinn.
Hinton	..do	1,450	19	56.2	−8.1	89	21	33	10	39	3.86	+0.07	1.30	0	10	12	7	12	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	24	53.2		86	19	29	10	42	6.07		2.09	0	12	12	6	13		R. C. Ferguson.
Huntington	Cabell	538	0	59.1	−5.8	91	19†	36	10	39	5.66	+1.71	2.12	0	10	13	3	15	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	0								6.28		2.45	0	11					Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	16	54.2	−6.7	83	19†	34	7	40	3.88	+0.15	1.67	0	9	11	11	9	nw.	Geo. T. Argabate.
Logan	Logan	687	13								5.43	+1.36		0	9					Agent C. & O. Ry.
Madison	Boone	704	10																	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	50.2	−8.6	80	20	28	10	34	4.09	+0.19	1.78	0	12	6	12	13	nw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23	49.0[c]		72[c]	17	34[c]	11	31[c]	5.38	+1.77	1.96	0	10	9[b]	5[b]	9[b]		Miss Donna Tully.
Point Pleasant	Mason	553	23	58.0	−7.5	90	20	30	10	41	6.13	+2.36	3.14	0	11	6	6	19	sw.	W. D. Holmes.
Powellton ††	Fayette	933	20	58.4	−5.7	91	20	35	9	40	7.34	+3.45	3.21	0	10	13	9	9		S. C. Lampert.
Rainelle	Kanawha	2,425	0																	A. L. Guthrie.
Raleigh	Beckley	2,130	0								3.14		0.53	0	10					Raleigh Coal & Coke Co.
Renick	Greenbrier	1 653	0								2.64		1.00	0	5				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	16	57.2	−7.1	88	18†	33	10	40	5.78	+2.22	2.53	0	9	12	1	18		E. C. Brace, Jr.
Ryan	Roane	700	13	55.6	−7.0	87	20	29	10	44	6.68	+3.18	3.34	0	14	6	13	12		Wm. E. Ryan.
Sissonville	Kanawha	625	0								5.48		2.55	0	5					J. N. Johnson.
Spencer	Roane	784	12								7.30	+3.72	2.10	0	7	4	3	24		A. M. McKown.
Sutton	Braxton	839	10								7.00	+2.81	2.35	0	10					C. B. Eakle.
Union	Monroe	2,250	12	54.2[a]	−6.7	86[a]	20	35	9†	44[a]	3.60	+0.98	2.00	0	7					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	53.6		89	18	32	14	48	4.15		1.40	0	8	20	7	4	nw.	J. M. Ayres.
Williamson	Mingo	660	16	57.8	−8.2	88	19†	38	14	38	3.82	+0.01	1.00	0	14	15	6	10	w.	J. F. Keyser.
Averages and	extremes			55.8	−7.0	93	19†	28	10	48	5.25	+1.59	3.52	0	10	11	7	13	nw.	
State averages and	extremes			55.5	−6.7	95	18	25	14	48	4.38	+1.05	3.52	T.	10	11	8	12	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[c] Approximated by the observer.

Daily Precipitation for May, 1917.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac	.12			.06	.20	.03	.07	.21	.27	.01		.20	.10										.60	.04			2.22	.61	.36			5.10
Brandywine	do	.17			.22	.03		.11	.16	.15			.04	T.									T.	.32				1.27	.41	.02	T.		2.90
Burlington	do				.32			.35		T.				T.							T.		.17				.95	.50	1.70	.25			4.24
Harpers Ferry ‖‖	do	.11	.41		.18	.21		T.	.05	.08														.30				.40	.47	.60			2.81
Martinsburg	do	.08			.45					.15													.10					.34	2.09				3.21
Moorefield	do	.04			.35	.02		.05	.09	.02				.04	.15												1.11	.40	.43	.23	.02		2.95
Piedmont	do	.21			.23	.08	T.	.03	.07	.08				.07										.44				.90	1.11	.04			3.26
Romney	do																																
Upper Tract	do				.25	.10	T.		.15	.20			.30	T.							T.	T.					1.58	.65				3.23
Northern Division.																																	
Bens Run	Ohio	.25			.28	.03			.22												.15		.21				.75	1.25	.85				3.99
Brandonville ‖‖	Monongahela	.12				.45			.22	.19	.14		.11											.20			.79		1.49	.69			4.40
Buckhannon	do				T.	.50	T.	T.	.25	.20		T.		T.							T.	.35	.78		.10		T.	2.25	1.47	.50			6.40
Cairo	Little Kanawha																																
Central Station	Middle Is. Creek																																
Cheat Bridge ‖‖																																	
Courtland ‖‖	Monongahela					.20			.35														.46				1.71	.40	.48	.49	.21	4.30
Creston ‖‖	Little Kanawha	.11			T.	.20	.05		.12	.24		T.	T.		T.						.30	.05	.90				1.89	1.46	.70			6.02
Davis ‖‖	Monongahela	.06				.10	.04	T.	.50	T.	.05		T.	T.	T.									.50				2.00	.69	.80	.23		4.97
Elizabeth ‖‖	Little Kanawha	.15							.07													.78		.43				1.80	2.10				5.36
Elkins***	Monongahela	.07			.02	.20	T.	.06	.54	.08		.09	.07	.02							.01		.30	.08			.76	1.28	.60	.17			4.35
Fairmont ‖‖	do	.03				.24	.02		.06	.19			.10		T.							T.	T.	.55	.02			1.28	1.19	.32	.03		4.03
Glenville ‖‖	Little Kanawha	.37			.06	.10	.04		.18	.08		.05									.60		92				2.05	1.52	.68			6.65
Gratten	Monongahela	.03			.06	.23			.33					.08	.06		*	*	*	*			.38	.18	.03			1.39	1.53	.30			4.60
Lost Creek	do	T.			.06	.09			.18	.04		T.	T.	T.							.03		.45	.23	T.		T.	2.10	1.52	.15			4.85
Mannington	do	.12			.20	.11	T.		.07	.07			.14	.04									.52	.50	T.			.94	1.42	.31		T.	4.44
Morgantown	do	.06			.05	.20		T	.25	.16		T.	.06	.07			.85				.17		.19	.34				.47	1.62	.50			4.99
Moundsville	Ohio																																
New Cumberland	do				.89	.05		T.						.19					.15	.32	.29	.06	.20	.21	T.			.09	.61	T.		T.	3.06
New Martinsville	do	.35			.25	.08	.05			.05			.15										.22	.20			.05	.58	1.30	.12			3.40
Parkersburg ***	Ohio				.10	.01	T.		.03	T.		T.		T.					T.		.88	T.	.42	T.	.03		1.64	.95	.95	.03		.02	5.06
Parsons	Monongahela				T.	T.	T.	T.	.48	T.	.44	T.	T.	T	.10								T	.66			T.	1.95	T.	T.	1.50		5.13
Philippi	do	.05			.07				.60	.10					.23						.20	.30					1.90	2.20	.40			6.05
Pickens	do	T.			T.	.35	T.	.08	.33	.40		.17	.20	T.	.08						.40	.07	.33	.22		.05	3.04	.70	.65			7.07
Rowlesburg ‖‖	do	.36				.44	.05		T.	.25	.06		.20		T.									.70	.08			1.46	2.30	1.04	.34		7.28
Saint Marys ‖‖	Ohio	.20	T.			.38	.05			.04			T.		T.					T.		.25	.05	.20	.03			1.35	1.45	.35	T.		4.33
Smithfield ‖‖	Fishing Creek	.09			.05	.19	.02		.02	.03			.04		.03									.50	.02			1.22	1.58	.72	.02		4.53
Terra Alta	Monongahela	.11			.10	.35			.18	.18	.24		.25	.05							.12			.42				1.85	1.20	.65			5.70
Wellsburg	Ohio	.70			.33	.05				.07		.02		.02					T.				T.	.35				.12	.90	.52			3.08
Weston	Monongahela	.15				.18			.20						.10							.70	.20					2.10	1.40	.93			5.96
Wheeling ‖‖	Ohio	.26		T.	.11	.35	.01	T.		.05			.01							T.	.13			.35	T.			.23	.41	.39	.15		2.45
Southern Division.																																	
Bancroft ‖‖	Great Kanawha	.16							.18	.15													.16	.54				2.90	2.03	.25			6.31
Beckley	do				.28			.52		.20													.43				1.88	.60	.29			.43	5.09
Bluefield	do																																
Camden-on-Gauley	do				.75			.85	.80	.11											1.30		.34				1.30	1.00	2.00				8.45
Charleston ‖‖	do	.04			.04	.25	T.	T.	.35	.25			.36									T.	T.	.24				2.38	1.10	.70			5.71
Clay	do	T.					T.	T.	1.05						T.								T.				T.	3.52	1.05	.62			6.24
Cuba	Sand Creek	.12			.12	.05	T.		.10			.03	T.	.03							.15		.11		T.	.05	2.45	.89	.09				4.19
Dam 19 O. R. ‖‖	Ohio	.52			.03	.06	.02		.02	T.					.01								.73	.02	.46	.02			1.80	1.50	.27			5.26
Dam 22 O. R. ‖‖	do	.24			.02	.10	.03		.09														.05	T.	.25				2.43	1.80	.43			5.44
Dam 28 O. R. ‖‖	do	.05			T.		T.		.10				.12												.55				1.48	1.32	.40			4.02
Dunlow	Big Sandy																																
Elkhorn	do																																
Evans	Ohio	.06			.08	T.	T.		.18	.01		.07			T.						.70		.15				.07	2.88	1.03	.04			5.27
Green Sulphur Spgs.	Great Kanawha	.30				.10		.34	1.40	.10		.35	.20	T.										.37				1.70		.20			5.06
Hinton ‖‖	do	.08			.14	.16			.34	.28			.16	T.										.18				1.30	.58	.04			3.86
Holcomb	do	.25			.04	.03		*	1.16			*	.29		T.								*	.54				2.95	*	.83			6.07
Huntington ‖‖	Ohio	.30				T.			.14	.32			.24		.04								.20	.86				2.12	1.16	.28			5.66
Kaylordsville	Great Kanawha	.12				.36	.02		.60	.29			.43	.02										.43				2.45	.69	.87			6.28
Lewisburg	do	.48			.10			.22	.47			.12	.04											.53				1.67	.25				3.88
Logan	Guyandotte				T.	.50		.54				.46	.08	.03									.28	.64				*	2.90				5.43
Madison ‖‖	Great Kanawha																																
Marlinton	do	.60			.24	.03		.18	.40	.06		.03	T.								T.		.46	.02	T.		T.	1.78	.25	.04		T.	4.09
Suttaliburg	do				.26	.30		.36	.60			.65	T.								T.	.20		.32			1.96	.30	.43				5.38
Point Pleasant ‖‖	Ohio	.16				.04	.05			.15		.11			.10								.10	.08				3.14	1.90	.27			6.13
Powellton	Great Kanawha	.73				.41		.40	.45			.21	.10										.35					3.21	1.25	.23			7.34
Rainelle ‖‖	do																																
Raleigh ‖‖	do	.39			.10	.30	.03		.38	.34			.46											.53				.32	.29				3.14
Renick ‖‖	do			.15						.65														.60				1.00	.24				2.64
Robertsburg ‖‖	do	.20							.10	.05			.13										.10	.65				2.53	1.55	.47			5.78
Ryan	do	.07		T.	.06	.02	.05	.04	.33	T.			.10								.24		.35	.43			.28	3.34	1.24	.13		T.	6.68
Sissonville ‖‖	do					T.	T.	.30	T												T.	T.	T	.41	T.	T	2.55	1.85	.37				5.48
Spencer ‖‖	Little Kanawha					.40	.60		T.																	2.10	2.00	1.15	.90		.15		7.30
Sutton	Great Kanawha					.10	T.		.30	.55	.20	.05	T.									.65	T.	.35				2.35	1.35	1.10				7.00
Union ‖‖	do	.50			.10			.40	.50		.05		.05															2.00						3.60
White Sulphur Spgs.	do	.50				.70		.10	.60	T.		.30	T.											.30				1.40	.25				4.15
Williamson ‖‖	Big Sandy	.31				.05			.26	.20	.02	.08	.10	.08	.02									.18	.50				1.00	.57	.45			3.82

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for May, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	64	56	52	45	40	42	50	43	44	45	50	46	48	58	62	65	69	78	79	75	79	77	72	55	53	69	75	79	57	72	74	60.4
	Minimum	41	38	32	35	34	33	36	37	33	32	34	31	34	35	40	45	55	53	50	61	50	42	36	38	42	31	52	50	42	48	54	41.1
Brandywine	Maximum	74	62	64	57	47	50	51	48	54	59	62	56	56	63	69	75	78	85	87	83	84	80	74	67	65	78	85	79	61	77	73	67.8
	Minimum	52	45	35	42	40	41	40	42	33	32	32	37	35	33	38	40	55	44	45	55	49	50	52	36	46	31	47	55	54	41	53	42.9
Burlington	Maximum	69	61	60	46	48	51	58	55	56	61	65	52	51	65	70	77	79	87	87	86	77	83	63	67	61	73	84	76	60	75	77	67.1
	Minimum	51	47	40	40	40	42	44	44	36	34	35	38	44	36	47	39	60	45	49	56	56	52	44	40	49	33	57	57	48	42	51	45.0
Martinsburg§	Maximum	68	64	68	47	45	55	55	58	57	61	67	61	63	70	73	79	80	92	89	87	74	78	66	69	61	75	89	67	60	78	77	68.8
	Minimum	49	50	45	43	41	41	42	45	40	40	37	38	45	49	50	51	46	50	53	61	57	55	58	42	45	37	45	59	53	48	52	47.3
Moorfield	Maximum	80	67	69	62	51	56	58	55	59	65	70	65	61	70	73	81	92	95	89	83	86	84	71	68	79	88	84	80	63	80	79	73.0
	Minimum	46	47	40	42	41	42	44	44	37	32	36	32	43	35	42	39	46	49	63	55	51	51	43	50	52	63	50	57	53	48	52	47.3
Piedmont	Maximum	69	59	60	53	50	51	55	53	54	60	63	56	57	65	69	74	76	85	87	83	75	79	75	64	59	74	81	71	59	75	77	66.7
	Minimum	50	45	39	41	39	40	42	44	39	35	34	39	42	43	43	41	50	47	51	57	55	53	44	39	47	35	55	57	52	41	49	44.8
Romney	Maximum	61	56	60																													
	Minimum	42	46	46																													
Upper Tract	Maximum	77	70	65	60	57	64	54	50	52	57	60	60	55	62		79	76	90	87	83	84	80	78	75	72	75	82	79	75	76	75	70.3
	Minimum	55	45	43	40	39	34	44	42	34	35	35	37	34	34		42	42	42	48	56	51	49	48	47	50	35	55	55	54	41	51	43.9
Northern Division.																																	
Bens Run	Maximum	65	62	62	68	54	57	55	52	53	62	64	53	60	69	75	77	81	86	87	85	84	75	63	64	63	60	58	60	75	80	83	67.5
	Minimum	47	44	49	42	41	41	43	44	42	34	43	40	43	37	42	46	58	48	53	63	55	57	42	46	43	45	40	39	43	49	56	45.6
Buckhannon	Maximum	70	61	57	62	55	52	55	49	53	59	60	57	54	62	62	72	77	82	84	81	79	79	60	62	63	70	80	77	60	75	80	66.1
	Minimum	48	42	40	45	43	41	41	44	40	31	42	40	38	33	33	41	58	47	52	52	52	60	44	44	47	34	57	57	50	42	52	44.8
Creston	Maximum	69	65	67	66	60	48	57	51	55	67	63	56	61	69	76	79	84	87	91	89	88	83	63	69	66	71	82	69	69	79	84	70.4
	Minimum	47	42	40	45	40	40	39	44	42	30	45	39	41	34	39	42	52	46	52	60	54	54	42	42	41	37	57	57	51	45	50	44.8
Elkins	Maximum	63	57	56	52	48	46	51	48	48	55	57	45	51	60	66	70	75	82	84	81	80	80	62	61	58	73	78	76	54	80	77	63.7
	Minimum	45	41	40	46	38	37	39	37	37	34	38	35	38	40	37	42	50	46	48	60	50	52	39	45	39	32	55	54	48	43	60	43.4
Fairmont§	Maximum	52	61	63	58	48	47	61	47	54	62	65	52	59	66	73	74	78	87	88	84	86	82	56	64	62	73	83	76	64	82	85	67.5
	Minimum	52	43	39	42	47	40	42	45	39	33	39	36	36	33	37	43	51	49	51	61	56	58	45	42	46	34	49	57	51	44	53	44.9
Glenville §	Maximum	80	65	68	72	67	49	60	55	55	64	65	63	60	70	78	78	84	89	90	90	88	86	86	69	67	75	84	82	69	82	84	73.4
	Minimum	47	45	40	45	40	40	40	44	40	30	45	39	40	35	35	38	53	43	50	58	54	53	43	40	40	38	57	57	50	46	47	43.9
Grafton	Maximum	70	57	57	57	57	50	53	53	51	51	59	59	49	58	67					73	78	78	61	61	61	69	69	69	62	75	75	62.2
	Minimum	47	43	34	45	41	42	41	39	45	41	33	36	36	36	36					41	55	55	42	43	47	35	52	57	51	44	54	43.4
Lost Creek	Maximum	65	60	60	63	56	47	56	50	54	61	65	56	59	64	69	74	77	84	87	83	83	83	59	58	60	70	81	71	65	74	80	66.9
	Minimum	46	43	34	43	40	39	40	44	39	27	37	35	31	25	35	40	45	44	47	61	51	51	42	42	45	30	58	55	50	42	51	42.3
Mannington	Maximum	68	58	57	56	54	45	57	53	53	60	64	58	58	65	70	74	78	85	85	83	82	79	61	64	61	69	80	71	63	75	81	66.7
	Minimum	45	43	33	40	41	40	41	43	38	30	34	34	33	31	34	38	51	44	48	63	53	54	42	40	44	38	56	57	50	42	51	42.8
Morgantown	Maximum	64	58	58	54	48	46	58	53	53	61	62	54	57	65	69	70	73	82	84	81	81	81	61	65	60	76	80	74	66	79	81	66.3
	Minimum	44	42	35	42	40	39	41	42	38	33	36	36	35	36	40	48	55	53	52	65	53	55	42	44	46	31	45	57	39	41	59	44.0
New Cumberland	Maximum	61	58	59	45	46	48	44	59	51	60	62	54	58	69	69	72	70	86	84	81	68	78	72	60	69	68	78	66	66	71	81	64.8
	Minimum	45	40	31	36	41	38	41	36	39	32	35	39	37	35	39	39	54	50	50	58	50	55	39	43	42	34	54	56	48	39	43	42.5
New Martinsville	Maximum	65	60	62	58	53	46	58	58	60	63	66	58	60	70	74	76	80	86	87	84	85	83	70	66	64	71	82	71	70	80	83	69.3
	Minimum	47	43	38	42	41	41	43	45	45	31	38	37	40	36	37	41	55	47	50	63	53	56	54	42	42	37	56	58	52	46	54	45.5
Parkersburg	Maximum	65	61	58	55	51	48	55	58	54	61	63	52	57	66	72	77	81	86	86	85	83	78	57	66	60	68	81	69	68	77	83	67.1
	Minimum	47	44	40	43	42	41	43	43	40	34	47	40	43	40	47	52	58	56	59	62	58	55	42	48	48	40	59	53	52	48	63	48.0
Parsons	Maximum	67	57	55	54	47	47	56	46	49	56	60	51	54	62	68	70	74	82	84	80	81	81	59	61	59	71	78	76	57	79	78	64.5
	Minimum	45	42	40	40	37	37	40	40	37	29	32	32	34	38	31	35	51	42	43	52	49	50	41	47	44	29	55	54	46	42	52	41.5
Philippi	Maximum	67	60	62	58	56	52	60	56	52	53	52	50	51	61	70	70	72	85	82	82	84	89	65	69	70	80	80	78	62	79	81	67.4
	Minimum	42	40	35	40	38	40	42	36	39	36	38	33	34	35	36	39	42	43	49	65	50	53	37	40	38	32	40	51	35	48	51	41.3
Pickens	Maximum	67	67	58	57	59	40	46	44	45	56	52	43	43	59	68	68	76	87	90	83	85	65	59	63	58	66	75	68	55	84	79	63.4
	Minimum	42	38	38	45	37	34	34	37	34	29	36	34	33	34	33	40	55	47	49	55	49	53	36	38	41	32	52	51	45	41	59	41.3
Terra Alta	Maximum	65	53	54	42	40	43	52	45	45	54	58	46	50	59	64	65	70	76	80	76	76	78	72	56	53	69	73	70	56	71	75	60.8
	Minimum	40	38	31	36	35	33	36	38	32	32	37	31	34	36	38	42	38	50	48	61	53	51	35	39	42	31	54	53	44	35	54	40.6
Wellsburg	Maximum	60	55	55	49	47	44	50	56	53	57	58	50	53	62	67	72	69	81	82	76	68	76	64	60	55	66	76	69	63	74	78	62.7
	Minimum	43	42	33	37	39	38	40	38	40	35	35	36	37	37	42	48	55	54	54	62	50	57	39	43	42	36	55	56	47	42	59	44.2
Weston	Maximum	61	62	60	65	62	46	56	57	54	60	63	58	56	65	76	75	79	83	87	84	82	83	64	64	64	70	82	72	63	78	81	68.1
	Minimum	47	49	44	45	41	40	41	44	42	31	43	40	38	34	38	42	61	47	53	64	62	52	42	44	47	36	56	57	51	45	56	46.2
Wheeling §	Maximum	52	62	65	50	51	46	61	62	58	67	67	57	64	72	77	76	81	90	91	87	82	83	56	67	62	77	83	75	69	81	85	69.5
	Minimum	47	43	36	40	42	40	40	42	42	32	32	39	42	37	37	41	47	48	53	55	55	54	42	42	45	38	40	59	50	45	46	43.6
Southern Division.																																	
Beckley	Maximum	70	71	70	68	62	59	62	60	59	70	70	48	49	70	71	76	78	82	82	82	84	78	72	65	76	79	80	75	74	78	82	70.7
	Minimum	40	43	40	45	42	38	42	40	39	38	38	40	41	43	46	52	45	48	49	48	56	44	41	42	39	49	50	49	41	48	48	43.8
Bluefield	Maximum																																
	Minimum																																
Charleston	Maximum	77	74	69	69	68	64	59	57	61	68	65	62	58	69	78	81	87	90	93	93	90	89	84	78	76	84	87	82	82	84	88	76.3
	Minimum	46	43	49	48	44	42	43	43	45	37	41	43	41	40	42	46	49	49	57	60	56	50	38	45	44	40	49	58	50	48	50	46.3
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum	64	65	62	58	57	52	48	48	49	62	60	50	56	60	71	75	80	84	87	87	86	85	62	67	72	78	82	77	66	79		67.6
	Minimum	49	42	38	37	36	35	38	39	36	32	38	38	37	38	36	45	55	54	55	55	57	55	45	36	50	48	58	48	52	51		44.4
Hinton §	Maximum	65	66	61	54	54	50	48	46	59	63	60	50	50	60	72	76	81	85	88	88	89	83	58	68	70	78	84	80	69	79	80	68.2
	Minimum	50	46	44	46	43	40	40	42	36	33	40	38	38	42	36	40	48	46	49	56	50	50	48	36	43	41	46	56	52	45	47	44.1
Holcomb §	Maximum	59	61	57	56	50	45	60	45	52	59	53	52	50	60	69	74	79	82	86	84	85	82	55	64	66	74	80	75	61	78	70	65.3
	Minimum	51	42	39	43	42	39	36	40	36	29	39	38	37	39	32	35	47	40	45	49	47	47	40	33	35	33	44	58	48	42	52	41.2
Huntington §	Maximum	64	68	61	69	50	51	55	59	61	67	62	54	59	71	78	82	86	89	91	91	88	82	62	72	73	82	82	68	73	79	85	71.4
	Minimum	47	45	47	47	41	41	41	43	42	36	39	44	42	38	41	52	54	50	54	57	58	60	44	44	47	44	50	50	52	49	52	46.8
Lewisburg	Maximum	74	61	59	57	47	46	45	46	54	57	55	48	50	57	67	71	76	80	83	82	83	78	73	63	65	75	79	76	63	76	73	65.1
	Minimum	52	42	41	44	39	37	34	41	36	35	40	36	38	35	41	41	59	42	48	54	47	47	43	36	47	35	53	55	49	39	57	43.3
Madison §	Maximum																																
	Minimum																																
Marlinton	Maximum	58	56	54	44	46	44	42	46	48	52	50	44	48	54	54	68	70	76	78	80	78	74	58	56	60	66	76	70	56	72	68	59.9
	Minimum	46	40	38	40	36	34	34	38	32	28	38	34	36	38	36	40	50	46	52	60	44	44	36	32	40	32	50	50	48	40	48	40.6
Point Pleasant	Maximum	66	67	63	64	59	50	57	61	59	68	64	58	60	68	78	82	86	88	89	90	88	83	66	70	70	68	83	69	73	77	85	71.3
	Minimum	44	39	42	42	39	39	37	37	40	30	45	37	40	34	41	46	54	47	53	62	51	59	40	45	44	37	56	55	49	45	56	44.8
Powellton	Maximum	65	66	63	63	58	48	50	53	60	63	59	52	53	59	71	79	83	86	88	91	89	84	71	77	77	80	85	73	70	82	83	70.3
	Minimum	40	45	45	40	42	41	40	41	35	38	48	42	43	40	55	44	55	48	52	56	60	54	48	42	47	40	48	55	53	45	61	46.5
Robertsburg§	Maximum	60	65	64	68	43	50	56	58	55	64	60	55	59	66	75	80	84	88	88	87	86	82	60	68	69	75	80	69	70	80	85	69.3
	Minimum	47	41	44	45	41	41	38	40	42	33	42	42	44	34	39	44	53	48	52	53	53	57	44	44	42	39	51	57	52	46	51	45.1
Ryan	Maximum	62	63	63	64	49	50	55	49	53	64	57	54	58	64	70	78	85	86	86	87	85	85	63	70	67	74	76	65	68	77	83	68.1
	Minimum	47	36	40	46	40	40	37	44	39	29	47	37	37	30	35	38	49	42	49	54	52	56	43	42	38	31	56	56	51	41	56	43.2
Spencer§	Maximum	80	85	83	70	71	67	70	67	68	71	75	76	74	70	77	80	88	86	87	86	70	81	80	77	73	70	71	75	77	77	87	76.4
	Minimum	37	39	40	39	37	38	40	50	40	33	39	40	41	35	41	37	40	43	44	50	41	40	39	40	39	35	33	41	40	45	46	40.1
Union §	Maximum	65	62	62	50	52	59	58	47	60	58	45	58	59	58	62	79	81	85	82	86	81	73	68	67	79	71	69	79	80	79		67.1
	Minimum	54	43	42	39	40	40	38	40	35	35	39	36	35	36	37	38	45	41	46	46	49	54	45	36	35	39	38	40	50	40	47	41.2
White Sulphur Spgs.	Maximum	71	69	62	59	49	46	46	47	56	63	57	50	53	59	71	75	80	89	86	85	86	83	75	65	69	72	70	69	65	67	70	66.6
	Minimum	40	44	37	45	40	39	34	34	35	33	35	36	35	32	33	36	55	41	46	51	46	46	47	35	45	43	45	44	40	43	44	40.6
Williamson §	Maximum	63	68	62	74	45	49	50	49	61	64	51	53	51	63	74	78	83	85	88	87	88	81	60	70	74	82	83	68	70	78	84	68.9
	Minimum	50	45	45	47	41	42	43	44	40	43	46	41	44	38	39	43	45	48	52	55	58	56	45	42	50	46	52	58	54	50	50	46.8

Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, May, 1911.



HWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JUNE, 1917

UNIVERSITY OF ILLINOIS LIBRARY
JUL 10 1917

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JULY 25, 1917

Departure of the Mean Temperature from the Normal, June, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (—).
Lines show amount of excess or deficiency.

G

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXV. PARKERSBURG, W. VA., JUNE, 1917. No. 6.

GENERAL SUMMARY.

June averaged cooler and considerably drier than usual. The month was characterized by the coolest weather of record for the season near the close of the second decade. On the morning of the 17th the temperature was below 40° at many of the stations, while at Bluefield, Mercer County, the reading was 31°. Light to heavy frosts occurred in the more elevated localities, but not much damage resulted. The rainfall distribution was somewhat unfavorable. In most counties during the first decade planting and cultivation were delayed by wet weather, while the ground was too dry near the close of the month. The rainfall in the southeastern and extreme eastern counties was also insufficient for favorable growth. The month closed with nearly an average wheat crop ready for harvest, and the outlook for oats was fair to good. Potatoes were generally in excellent condition, with a large acreage. Pastures and meadows were short and corn was especially backward. The prospect for fruit was fair.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.06 and 30.04 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.42 inches on the 17th, and 29.74 inches on the 9th. Elkins, 30.44 inches on the 17th, and 29.76 inches on the 10th.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 67.7°. The mean departure from the normal for 40 stations having ten or more years of record was —1.1°. The month opened with the temperature somewhat above the normal and slight plus departures were also noted on the 6-7th, 12-13th, 23-24th, and 26-28th. A light frost occurred at Bayard, Grant County, on the 4th, and exceptionally cool weather for the season prevailed from the 15th to the 18th, with light to heavy frosts in the mountain districts. With the exception of two or three days, the weather was also somewhat cooler than usual after the 18th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 80 per cent; 8 p. m., 71 per cent. The June averages for the same hours for the past 28 years are 79 and 69 per cent, respectively. Elkins, 8 a. m., 82 per cent; 8 p. m., 70 per cent. The June averages for Elkins for the same hours for the past 16 years are 84 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 62 stations reporting, was 3.81 inches. The departure from the normal for 46 stations having ten or more years of record was —0.68 inch. The rainfall was heaviest over the western counties and lightest over the southeastern counties and eastern panhandle section. Showers were frequent in most localities on the first eleven days and the rainfall was moderately heavy in the western and central counties on the 1st-2d, 6-7th, and 9-10th. Light showers also occurred at many stations on the 14-15th, 19-20th, 23d-24th, and 29-30th.

WIND.

The average wind velocity at Parkersburg was 4.9 miles per hour, or 0.4 mile above the June average for the past 27 years. The average at Elkins was 3.2 miles per hour, or 0.1 mile below the June average for 17 years. The highest velocity at Parkersburg was 39 miles per hour from the northwest on the 27th, and at Elkins 26 miles per hour from the west on the 7th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 58 per cent of the possible amount, or 1 per cent above the June average for 19 years. The average at Elkins was 50 per cent, or 3 per cent below the June average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 4th, 6th, 9th, 12th, 13th, 17th, 18th, 22d, and 30th; Dam No. 26, 4th, 12th, and 22d; Davis, 14th; Elkins, 4th, 9th, 13th, 17th, 18th, 19th, 21st, and 22d; Hinton, 4th, 12th, and 23d; Huntington, 4th and 22d; Mannington, 4th, 12th, 13th, 16th, 17th, 25th, and 30th; Marlinton, 11th, 12th, 13th, 17th, 18th, 22d, and 23d; New Cumberland, 2d, 4th, 5th, 6th, 12th, 13th, 15th, 17th, 18th, 19th, 21st, 25th, and 30th; Pickens, 14th; Robertsburg, 4th, 17th, and 22d; Romney, 11th, 12th, and 13th; Rowlesburg, 4th, 11th, 12th, 17th, and 30th; Smithfield, 11th and 12th; Wheeling, 4th, 12th, and 13th.

Frost, light: Bayard, 4th and 17th; Elkins, Marlinton, Pickens, Romney, and Wellsburg, 17th.

Hail: Camden-on-Gauley, 27th; Creston, 7th and 23d; Dam No. 26, 19th; Holcomb, 19th; Lost Creek, 6th; Morgantown, 24th; Nuttallburg, 18th; Pickens, 1st; Terra Alta, 6th; Wheeling, 19th, 27th, and 28th; Williamson, 19th.

Halos, lunar: Parkersburg, 3d, 4th, 7th, and 8th; Ryan, 3d.

Halos, solar: Grafton, 4th; Wellsburg, 21st.

Thunderstorms (dates and number of stations reporting): 1st, 15; 2d, 10; 3d, 1; 5th, 8; 6th, 13; 7th, 13; 8th, 5; 9th, 9; 10th, 12; 11th, 2; 13th, 1; 14th, 3; 19th, 10; 20th, 4; 21st, 1; 22d, 2; 23d, 6; 24th, 6; 26th, 2; 27th, 14; 28th, 11; 29th, 5.

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Mean.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	71.2	..	....	5.02	....	....	...	..	..	..
1892	74.1	99	41	3.90	....	....	....	..	..	..
1893	70.2	99	40	3.81	6.41	1.83	....	13	10	7
1894	70.4	103	32	3.27	6.78	1.25	....	16	10	4
1895	72.1	102	38	2.92	5.66	1.20	....	15	10	5
1896	69.8	95	30	5.35	9.86	0.11	....	8	14	8
1897	69.3	96	35	4.31	6.77	1.31	....	12	12	6
1898	70.9	99	41	3.21	7.50	0.66	....	14	11	5
1899	72.0	98	35	4.99	8.93	1.46	....	14	9	7
1900	71.2	98	41	5.30	15.62	2.49	....	9	12	9
1901	70.7	104	32	5.67	11.10	1.37	....	12	12	6
1902	68.0	100	33	5.19	8.49	2.45	....	11	13	6
1903	65.1	93	34	4.80	12.30	2.01	....	8	11	11
1904	69.5	97	36	4.20	8.29	2.05	....	10	13	7
1905	70.6	100	34	4.38	7.72	1.74	....	13	11	6
1906	70.9	101	38	5.25	9.32	2.84	.. .	11	12	7
1907	65.3	97	33	6.00	11.95	1.93	....	10	11	9
1908	69.2	98	36	3.12	6.75	1.35	....	15	10	5
1909	71.1	101	35	5.73	9.19	2.47	....	9	13	8
1910	66.6	96	32	5.67	11.27	1.52	....	10	10	10
1911	70.7	101	40	4.44	9.34	1.88	....	14	10	6
1912	67.3	95	29	4.27	9.21	1.11	....	13	10	7
1913	69.5	99	29	3.44	6.55	0.86	....	18	8	4
1914	72.0	100	30	3.00	6.60	0.62	....	15	11	4
1915	67.7	95	33	3.63	7.09	1.21	....	15	8	7
1916	65.8	94	35	5.42	14.54	2.50	....	14	8	8
1917	67.7	99	31	3.81	6.58	1.38	....	14	9	7
Means and extremes ..	69.6	104	29	4.45	15.62	0.11	. ..	12	11	7

Climatological Data for June, 1917.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	63.2	−0.3	85	26	35	17	38	2.64	−2.43	0.79	0	15	7	3	20	w.	G. C. Dixon.
Brandywine	Pendleton		0	66.6	.....	93	26	34	17	47	1.38	.....	0.62	0	11	24	2	4	sw.	Elmer Keister.
Burlington	Mineral	875	22	67.4	−1.0	91	26	40	17	40	2.12	−1.95	0.47	0	8	9	20	1	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27	.....	.....	.....	.....	.....	.....	.....	3.05	−0.86	1.99	0	9	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	24	71.4	+0.7	93	26†	48	17†	37	3.58	−0.74	.....	0	8	20	9	1	s.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	70.8	+1.6	99	26	40	17	52	1.90	−2.41	0.30	0	14	28	1	1	.....	M. S. Henkel.
Piedmont	Mineral	919	0	67.1	.....	93	26	39	11	42	2.25	.....	0.76	0	15	7	18	5	sc.	C. A. Suter, Jr.
Romney	Hampshire	824	19	70.4	+0.6	97	26	47	18	47	3.52	−0.34	0.84	0	11	6	24	0	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	68.4[a]	+0.7	93[a]	27	36[a]	17	47[a]	1.60	−2.06	0.60	0	4	24	3	3	w.	J. M. Mallow.
Averages and	extremes	.....	....	68.2	+0.4	99	26	34	17	52	2.45	−1.54	1.99	0	11	16	10	4	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	68.4	−1.8	92	26	43	17	35	4.80	+0.04	0.90	0	15	17	11	2	.....	J. D. Riggs.
Brandonville	Preston	1,809	6	.....	.....	.....	.....	.....	.....	.....	5.61	.....	2.61	0	9	.....	.....	.....	.....	W. T. Miller.
Buckhannon	Upshur	1,411	20	66.3	−2.3	88	26	39	17	40	4.09	−0.84	0.96	0	12	17	4	9	.....	H. A. Darnall,
Cairo	Ritchie	674	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Van A. Zevely.
Central Station	Doddridge	950	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. H. Doak.
Cheat Bridge	Randolph	3,600	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Walter Cole.
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	3.29	−1.09	0.85	0	7	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	15	68.8	−1.7	90	13†	41	17	43	4.65	+0.06	1.03	0	12	15	6	9	sw.	J. M. Reed.
Davis	Tucker	3,093	8	.....	.....	.....	.....	.....	.....	.....	3.43	.....	0.43	0	12	15	3	12	sw.	Ross C. Male.
Elizabeth	Wirt	646	5	.....	.....	.....	.....	.....	.....	.....	3.95	.....	1.45	0	7	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,940	16	65.0	−1.7	90	26	36	17	38	3.52	−1.52	0.95	0	16	6	11	13	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	68.7[a]	−1.3	94[a]	26	41	16	40[a]	4.20	−0.39	1.35	0	15	20	6	4	w.	F. P. Hall.
Glenville	Gilmer	738	23	71.2	+0.7	97	26†	41	16†	41	5.16	+0.81	1.56	0	12	12	14	4	w.	M. T. Brannon.
Grafton	Taylor	1,000	24	65.7	−3.6	90	26†	42	17	34	3.27	−1.41	0.89	0	11	14	10	6	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	66.6	−1.1	90	26	37	17	41	5.82	+1.89	1.81	0	12	16	5	9	w.	Allen Smith.
Mannington	Marion	974	14	66.4	−1.7	89	26	40	16†	37	6.58	+2.56	2.31	0	17	9	12	9	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	69.4	+0.5	94	26	40	17	43	3.63	−0.97	1.16	0	13	15	2	13	s.	R. W. Muldoon.
Moundsville	Marshall	642	14	71.2	+1.5	95	13	40	16†	42	3.90	+0.38	0.70	0	11	15	10	5	w.	M. Z. White.
New Cumberland	Hancock	987	19	66.1	−1.8	89	26	37	17	36	5.76	+1.09	1.40	0	16	5	22	3	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	69.2	−2.2	90	26†	43	16	36	5.94	+1.95	1.40	0	15	15	10	5	s	Wm. Ankrom,
Parkersburg	Wood	638	28	68.6	−2.8	93	26	41	17	34	3.17	−1.48	0.76	0	16	11	11	8	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	64.2	−2.1	89	25	39	16	39	4.58	−1.00	1.50	0	7	14	12	4	.....	J. W. Swisher.
Philippi††	Barbour	1,149	20	69.4	.....	98	28	.....	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	....	Okey J. Robinson.
Pickens	Randolph	2,697	14	63.8	−1.4	92	13	35	17	42	4.80	−1.33	1.32	0	14	17	9	4	w.	Dr. J. L. Cunningham,
Rowlesburg	Preston	1,375	30	.....	.....	.....	.....	.....	.....	.....	2.95	−1.96	0.80	0	12	.....	.....	.....	.....	J. F. Pierce.
Saint Marys	Pleasants	577	8	.....	.....	.....	.....	.....	.....	.....	3.48	.....	0.60	0	14	.....	.....	.....	.....	Wm. Hughes.
Smithfield	Wetzel	835	11	67.2	−0.8	92	26	40	17	40	5.43	+0.80	1.16	0	18	21	3	6	e.	G. M. Whisler.
Terra Alta	Preston	2,612	16	62.7	−3.5	84	26	35	17	36	3.22	−4.59	0.85	0	12	18	11	1	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	66.0	−1.3	85	26	40	16†	30	3.50	−0.96	0.72	0	15	6	16	8	w.	C. P. Waugh.
Weston	Lewis	1,026	21	68.5[d]	−2.5	91	26	41[d]	17	36[d]	4.25	−0.15	0.95	0	12	11	16	3	.....	Weston State Hospital.
Wheeling	Ohio	645	30	69.8	.....	95	26	40	16	44	3.59	−0.30	0.87	0	15	14	5	11	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	67.3	−1.5	97	26†	35	17	44	4.32	−0.37	2.61	0	13	14	9	7	w.	
Southern Division.																				
Bancroft	Putnam	574	12	68.3	−2.8	92	26	42	17	35	4.65	+0.04	1.20	0	12	20	3	7	ne.	R. E. Dent.
Beckley ††	Raleigh	2,440	16	65.2	−2.0	90	26	36	16	43	3.14	−0.89	0.68	0	7	13	9	8	w.	John A. Ewart.
Bluefield†† [a]	Mercer	2,558	21	66.6	−2.3	86	26†	31	17	44	2.10	−2.78	0.63	0	7	18	4	7	.....	Norfolk & Western Ry
Camden-on-Gauley	Webster	2,062	1	.....	.....	.....	.....	.....	.....	.....	6.18	.....	1.00	0	7	17	0	13	.....	C. A. Droddy.
Charleston	Kanawha	597	13	73.4	+0.8	99	26	43	17	43	3.39	−1.13	0.70	0	9	11	1	18	w.	C. V. Lewis.
Clay	Clay	706	0	.....	.....	.....	.....	.....	.....	.....	3.33	.....	0.86	0	8	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba	Jackson	650	14	68.8	+1.1	95	27	40	17	41	4.66	+0.71	1.90	0	14	9	20	1	w.	C. T. Perry.
Dam 19 O. R.	Wood	557	0	.....	.....	.....	.....	.....	.....	.....	3.85	.....	0.75	0	17	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R††	Jackson	538	1	.....	.....	.....	.....	.....	.....	.....	4.25	.....	0.86	0	13	.....	.....	.....	....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0	.....	.....	.....	.....	.....	.....	.....	4.21	.....	0.90	0	11	.....	.....	.....	.....	U. S. Engineer Office.
Dunlow	Wayne	703	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James W. Damron.
Elkhorn	McDowell	1,933	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans	Jackson	606	0	69.4	.....	90	26	45	16†	30	3.90	.....	0.85	0	16	11	4	15	.....	B. F. Sayre.
Green Sulphur Spgs.	Summers	1,600	20	71.4	+3.0	94	26	44	18†	39	4.50	+0.50	1.40	0	9	13	4	13	w.	W. H. Gwinn.
Hinton	...do	1,450	19	68.7	−2.0	95	26	41	17	39	2.34	+1.77	0.60	0	11	15	3	12	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	24	65.1	.....	92	26	33	17	46	4.80	.....	1.19	0	11	12	10	8	.....	R. C. Ferguson.
Huntington	Cabell	538	0	71.7[g]	−0.8	97	26	.....	.....	34[g]	4.60	+0.33	1.14	0	12	12	5	13	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	0	.....	.....	.....	.....	.....	.....	.....	5.09	.....	0.87	0	16	.....	.....	.....	.....	Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	16	65.5	−1.9	89	26	34	17	39	2.09	−2.03	0.43	0	8	15	11	4	sw.	Geo. T. Argabate.
Logan	Logan	687	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	61.2	−4.1	86	26	34	17	36	2.23	−2.58	0.51	0	16	5	18	7	sw.	S. L. Brown.
Nuttallburg [g]	Fayette	2,252	23	61.4	.....	82	5†	37	17	43	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	23	69.0	−3.7	95	26	41	17	39	4.59	+0.22	1.00	0	10	11	6	13	sw.	W. D. Holmes.
Powellton	Fayette	933	20	69.8	−0.9	95	26	41	18	43	4.62	−0.13	0.80	0	12	13	15	2	.....	S. C. Lampert.
Rainelle	Kanawha	2,425	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Guthrie.
Raleigh	Beckley	2,130	0	.....	.....	.....	.....	.....	.....	.....	2.51	.....	0.68	0	13	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1 653	0	.....	.....	.....	.....	.....	.....	.....	2.89	.....	1.49	0	4	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	16	69.6	−1.7	95	26	42	17	42	4.53	+0.81	0.99	0	13	16	3	11	.....	E. C. Brace, Jr.
Ryan	Roane	700	13	67.6	−1.2	90	22†	38	17	37	4.35	−0.02	0.80	0	11	12	12	6	.....	Wm. E. Ryan.
Sissonville ††	Kanawha	625	0	.....	.....	.....	.....	.....	.....	.....	3.41	.....	0.60	0	9	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	12	.....	.....	.....	.....	.....	.....	.....	2.80	−1.71	0.70	0	6	9	10	11	.....	A. M. McKown.
Sutton	Braxton	839	10	.....	.....	.....	.....	.....	.....	.....	3.15	−2.64	0.80	0	12	.....	.....	.....	.....	C. B. Eakle.
Union	Monroe	2,250	12	67.2[a]	+0.6	92[a]	25	37	17	46[a]	2.64	−1.46	0.80	0	6	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	66.8	.....	90	27	35	17	41	1.70[e]	.....	0.65	0	7	23	6	1	nw.	J. M. Ayres.
Williamson	Mingo	660	16	70.0	−2.2	92	27	46	17	36	3.78	−1.06	0.70	0	15	16	5	9	w.	J. F. Keyser.
Averages and	extremes	.....	....	68.0	−1.1	99	26	31	17	46	3.74	−0.75	1.90	0	11	13	8	9	w.	
State averages and	extremes	.....	....	67.7	−1.1	99	26	31	17	52	3.81	−0.68	2.61	0	12	14	9	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[e] Approximated by the observer.

Daily Precipitation for June, 1917.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
ayard	Potomac	.36	.05	.04	....	.11	.69	.10	.18	.22	.18	....	....	....	.02	.16	....	....	....	....	.02	....	....	T	.19	....	....	.06	....	.26	....	....	2.64
randywine	....do	.04	.05	....	....	T.	T.	T.	.03	.15	.05	.57	....	....	T.	.08	....	....	....	....	.07	....	....	.23	....	....	....	.06	....	.05	....	....	1.38
urlington	....do	.28	....	....	....	.47	.20	T	T.	.32	....	....	....	....	T.	T.	....	....	....	.29	T.	....	....	.26	....	....	....	.13	.17	....	....	....	2.12
arpers Ferry ||||	....do	.15	.30	....	T	....	.12	1.87	....	T.	....	.21	.22	....	....	T.	.05	....	....	....	....	....	....	.05	.08	....	....	....	....	....	....	....	3.05
artinsburg	....do	.26	T.	....	....	....	*	1.85	....	.05	.73	.48	....	....	....	.10	....	....	....	....	T.	....	T.	....	.11	....	....	T.	....	....	....	....	3.58
oorefield	....do	.14	.02	.13	....	....	....	.30	.07	.15	.10	.13	....	....	....	.07	....	....	....	.14	.23	....	....	....	....	....	....	.11	.12	.19	....	....	1.90
iedmont	....do	.19	.04	.03	....	....	.76	.21	.06	.12	.21	....	....	....	....	.15	....	....	....	.04	.07	....	....	.13	.08	....	....	.09	....	.07	....	....	2.25
omney	....do	....	.08	.20	....	T.	.84	.82	.10	.05	.58	.20	....	....	T.	.15	....	....	....	....	....	....	....	T.	.05	....	....	....	.45	....	....	....	3.52
pper Tract	....do	....	....	....	....	T.	T.	....	....	.60	.20	....	....	....	....	T.	....	....	....	....	.40	....	....	....	....	....	....	T.	....	.40	....	....	1.60
Northern Division.																																	
ens Run	Ohio	.82	.09	.12	....	.08	.17	.13	.43	.90	.50	....	....	....	.13	....	....	....	....	.12	....	....	....	.28	....	....	....	.66	.13	.24	....	....	4.80
randonville ||||	Monongahela	....	.65	.62	.06	....	....	2.61	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.20	.64	....	.12	.15	.56	....	....	5.61
uckhannon	....do	.42	.30	.15	....	.05	.58	.17	.15	.46	.10	T.	....	....	T.	.55	T.	....	....	....	T.	....	....	....	T.	....	....	.96	T.	.20	....	....	4.09
iro	Little Kanawha	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
ntral Station	Middle Is. Creek	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
eat Bridge ||||		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
ortland ||||	Monongahela	....	.40	....	....	....	.10	.45	....	.35	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.83	....	....	.31	.85	....	....	....	3.29
reston ||||	Little Kanawha	.10	1.03	.38	....	....	.07	.73	....	.16	.70	.22	....	T.	....	.17	....	....	....	....	....	....	....	....	.14	....	....	....	.35	.60	....	....	....	4.65
avis ||||	Monongahela	.08	.43	T.	....	T.	....	.28	.06	....	.40	.42	....	....	....	.26	....	....	....	....	T.	.10	....	T.	.32	....	T.	....	.42	.36	.30	....	....	3.43
izabeth ||||	Little Kanawha	....	1.10	.20	....	....	....	.38	....	....	.12	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.35	.35	1.45	....	....	3.95
lkins ***	Monongahela	.18	.14	....	....	.03	.20	.18	.03	.17	.44	....	....	....	.03	.43	....	....	....	.10	T.	....	....	.01	.46	....	....	.95	.10	.07	....	....	3.52
irmont ||||	....do	.41	.30	.14	....	....	.20	1.35	.07	.26	.48	.05	T.	....	.03	.04	....	....	....	....	....	T.	....	T	T.	....	....	.10	.11	.38	.28	....	4.20
lenville ||||	Little Kanawha	....	1.25	.22	....	T.	.07	.48	....	.36	.30	.24	T.	....	.05	.03	....	....	....	....	....	....	....	....	....	....	....	T.	.60	1.22	.34	....	5.16
rafton	Monongahela	.67	.04	.12	....	....	.89	.50	.17	.25	.02	....	....	....	....	.24	....	....	....	....	....	....	....	....	....	....	....	.19	T.	.18	....	....	3.27
st Creek	....do	.58	.38	.40	....	.02	....	.70	.51	.35	.08	T.	....	....	....	.13	....	....	....	....	....	....	....	....	.56	....	....	.30	....	1.81	....	....	5.82
nnington	....do	1.45	.04	.27	....	.02	2.31	.28	.31	.36	.17	.01	....	....	.11	.04	....	....	....	....	....	....	....	.01	.01	....	....	.04	.22	.93	....	....	6.58
organtown	....do	1.16	.09	.05	....	.05	.45	.71	.21	.22	T.	T.	....	....	.03	.08	T.	....	....	....	....	....	....	T.	.07	....	....	.07	T.	.44	....	....	3.63
oundsville	Ohio	.45	....	.10	....	T.	.40	....	.40	.30	.45	....	....	....	.20	....	....	....	....	T.	....	....	....	.20	....	....	....	.70	.30	.40	....	....	3.90
ew Cumberland	....do	1.00	T.	.12	....	.47	.50	.06	.23	.02	.19	T.	....	....	.08	.19	T.	....	....	....	.16	....	T.	.07	.66	....	T.	.61	1.16	.24	....	....	5.76
ew Martinsville	....do	1.40	....	.80	....	....	.95	.30	.45	.24	.30	....	....	....	.10	.15	....	....	....	.10	....	....	....	.15	.05	....	....	.15	.20	.60	....	....	5.94
arkersburg ***	Ohio	.45	.48	....	....	.06	.03	.16	.35	.24	.03	T.	....	....	.23	....	....	....	....	.06	....	.01	.03	.03	....	....	....	.72	.27	.02	....	....	3.17
rsons	Monongahela	1.50	T.	.58	....	T.	....	....	....	1.25	....	.05	....	....	T.	T.	.48	....	....	....	....	....	....	T.	....	.22	....	....	.50	....	....	....	4.58
hilippi	....do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
ckens	....do	.24	.60	....	....	.25	.05	.11	T.	.16	.50	.15	....	....	.22	.16	....	....	....	T.	....	....	....	....	.20	....	....	1.32	.20	.64	....	....	4.80
owlesburg ||||	....do	.50	.14	.18	....	....	.35	.80	T.	.05	.36	.06	....	....	....	.08	.12	....	....	....	....	....	....	....	....	....	....	....	....	.25	.06	....	2.95
int Marys ||||	Ohio	.16	.44	.24	T.	....	.17	.15	T.	.38	.60	T.	T.	T.	.10	.10	T	....	....	....	.10	T.	.10	.42	T.	....	....	.32	.20	T.	....	....	3.48
aithfield ||||	Fishing Creek	.55	.97	.17	....	....	.34	.52	.02	.32	.61	1.16	.01	....	.08	.08	....	....	....	....	....	....	....	.05	.05	....	.05	.07	.18	.20	....	....	5.43
erra Alta	Monongahela	.40	.05	....	....	....	.85	.55	.27	.20	.07	....	....	....	.05	.23	....	....	....	....	....	....	....	....	.15	....	....	....	.05	.35	....	....	3.22
ellsburg	Ohio	.32	....	....	....	.10	.42	.10	.12	T.	.45	.02	....	....	.05	.10	....	....	....	....	....	.06	.13	.16	....	....	....	.72	.50	.25	....	....	3.50
eston	Monongahela	.50	.15	.35	....	....	.15	.80	.35	.40	.25	....	....	....	....	.20	....	....	....	....	....	....	....	.15	....	....	....	.35	....	.60	....	....	4.25
heeling ||||	Ohio	.46	T.	.13	....	....	.19	.15	.02	.20	.11	.25	....	....	.06	T.	T.	T.	....	....	.33	....	....	.16	T	....	....	.67	.20	.60	.06	....	3.59
Southern Division.																																	
ancroft ||||	Great Kanawha	.08	.63	.36	....	....	.08	.65	....	.18	.15	.28	....	....	.18	....	....	....	....	....	.46	....	....	....	....	....	....	....	.40	1.20	....	....	4.65
eckley	....do	.37	....	....	....	....	.17	....	....	.66	.21	....	....	....	.47	....	....	....	....	.68	....	....	....	....	....	....	....	.58	....	....	....	....	3.14
luefield	....do	.15	....	....	.20	.10	....	.63	....	....	.37	....	....	....	.45	....	....	....	....	....	....	....	....	....	....	....	....	....	.20	....	....	....	2.10
amden-on-Gauley ||||	....do	.87	.92	....	....	1.00	....	.87	....	....	....	....	....	....	.76	....	....	....	....	....	....	....	....	....	....	....	....	1.00	.76	....	....	....	6.18
harleston ||||	....do	.10	.70	.10	....	....	....	.60	....	.18	.36	....	....	....	.20	....	....	....	....	....	....	....	T.	....	T.	....	....	....	.70	.45	....	....	3.39
lay	....do	....	.86	....	....	....	....	35	.30	....	.76	T.	....	....	....	....	....	....	....	....	.36	....	....	....	....	....	.16	.36	....	.18	....	....	3.33
uba	Sand Creek	1.90	.19	.07	.09	....	....	.10	.30	.75	.22	....	....	....	.04	....	....	....	....	.20	....	....	.05	T	....	....	....	.29	.18	.28	....	....	4.66
am 19 O. R. ||||	Ohio	.02	.75	.63	.01	....	.05	.18	....	.61	.65	.02	....	....	.05	.13	....	....	....	....	.11	....	.02	.04	.01	....	....	.22	.37	....	....	3.85
am 22 O. R. ||||	....do	.15	.86	....	....	....	.10	.30	....	.46	.38	.08	....	....	.05	.08	....	....	....	....	.20	....	....	....	.15	....	....	.74	.70	....	....	....	4.25
am 26 O. R. ||||	....do	.12	.25	.62	....	....	....	.67	....	.10	.45	.03	....	....	....	.03	....	....	....	....	.80	....	....	....	....	....	....	.20	.90	....	....	....	4.21
unlow	Big Sandy	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
lkhorn	....do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
vans	Ohio	.40	.85	.04	....	.15	.03	.34	.06	.38	.09	T	....	....	.14	.24	....	....	....	.05	.04	....	....	....	....	....	....	.20	.27	.62	....	....	3.90
reen Sulphur Spgs.	Great Kanawha	.40	.65	....	....	T.	....	.20	....	1.40	.10	....	....	....	.20	....	....	....	....	....	.65	.30	....	....	....	....	....	.60	....	....	....	....	4.50
inton ||||	....do	....	.20	.28	....	....	....	.22	.10	....	.60	.16	....	....	T.	.10	....	....	....	....	.12	....	.40	....	....	....	....	.10	.06	....	....	2.34
olcomb	....do	*	1.87	....	....	.31	....	T.	....	*	.52	....	....	....	T.	.21	....	....	....	.25	....	.18	....	....	T.	....	....	.27	*	1.19	....	....	4.80
untington ||||	Ohio	.56	1.14	.10	....	....	.18	.76	....	.08	.20	.20	....	....	.22	....	....	....	....	....	.34	....	....	....	....	....	....	....	.58	.24	....	....	4.60
ayford ||||	Great Kanawha	.40	.65	.87	....	....	.20	.14	....	.17	.53	.10	.25	.10	....	....	....	....	....	....	.10	....	.79	....	....	.35	.10	....	.26	.08	....	....	5.09
ewisburg	... do	.33	.42	....	....	T.	....	.41	T	.43	.06	....	....	....	....	....	....	....	....	....	....	.20	....	....	.06	....	....	....	....	.18	....	....	2.09
ogan	Guyandotte	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
adison ||||	Great Kanawha	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
arlinton	....do	.18	.51	....	....	.14	.04	.02	.02	.46	.16	....	....	....	.04	T.	....	....	....	.06	.08	T.	....	....	.04	....	....	.30	.12	.04	.02	....	2.23
uttallburg	....do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
oint Pleasant ||||	Ohio	....	.50	.37	....	....	....	.40	....	.25	....	.36	....	....	....	.25	....	....	....	....	.48	....	....	.03	....	....	....	....	1.00	.95	....	....	4.59
owellton		.70	.70	.18	....	.43	....	.12	....	....	....	.66	....	....	.33	....	....	....	....	....	.80	.25	....	....	.03	....	....	.26	....	.16	....	....	4.62
aincle ||||	Great Kanawha	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
aleigh ||||	....do	.26	.23	....	....	.06	....	.18	....	.05	.68	.05	....	....	.05	.24	....	....	....	....	.28	....	.11	....	....	....	....	.28	.04	....	....	....	2.51
enick ||||	....do	....	.30	.45	....	....	....	....	....	....	.65	....	....	....	....	....	....	....	....	....	1.49	....	....	....	....	....	....	....	....	....	....	....	2.89
obertsburg ||||	....do	.38	.40	.30	....	....	.10	.57	....	.12	.99	.12	....	....	.13	.08	....	....	....	....	.15	....	....	....	....	....	....	.33	.86	....	....	....	4.53
yan	....do	.59	.80	....	....	.06	.01	.57	.21	.66	.43	....	....	....	.21	....	....	....	....	....	....	....	....	....	....	....	....	....	.71	.10	....	....	4.35
ssonville ||||	....do	....	.50	.45	....	.07	T.	.49	.19	....	.41	T.	....	....	.15	....	....	....	....	....	....	....	....	....	....	....	....	.60	.55	....	....	....	3.41
pencer ||||	Little Kanawha	.70	.50	.40	....	....	.10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.40	.70	....	....	....	....	2.80
utton	Great Kanawha	....	.50	.15	....	....	.10	.15	....	.15	.50	.30	....	....	....	.30	....	....	....	....	....	....	....	....	.05	....	....	.80	....	.05	.10	....	3.15
nion ||||	....do	....	.30	T.	....	T.	....	.28	....	T.	.60	....	....	....	....	....	....	....	....	.80	....	....	.30	....	....	....	....	.36	....	....	....	2.64
hite Sulphur Spgs.	....do	.25	.30	....	....	....	....	.20	....	.65	....	....	....	....	T.	....	....	....	....	....	....	.05	....	....	T.	....	....	....	.10	.15	....	....	1.70
Villiamson ||||	Big Sandy	....	.50	.38	....	....	.01	.30	....	.06	.35	.04	....	....	.36	.10	....	....	....	....	.70	....	.06	....	....	.30	....	....	.14	.44	.04	....	3.78

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

\|\|\|\| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

†††† Probably incomplete.

Daily Temperatures for June, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	75	76	69	70	79	71	72	74	72	72	71	78	84	82	57	54	73	77	75	75	74	78	81	79	76	85	81	84	74	75	....	74.8
	Minimum	57	54	53	42	52	51	62	54	53	54	51	45	58	53	43	38	35	43	49	52	42	50	60	53	52	58	57	58	59	58	....	51.6
Brandywine	Maximum	85	83	81	80	78	86	83	80	77	78	79	86	88	81	68	64	75	84	84	80	82	85	84	87	83	93	92	87	82	83	....	81.9
	Minimum	58	52	53	43	50	53	58	47	49	58	58	53	58	58	46	36	31	37	46	50	47	52	54	60	50	53	58	60	61	48	....	51.3
Burlington	Maximum	84	84	76	77	73	81	82	73	77	79	78	84	88	77	64	64	74	81	84	80	81	84	82	85	78	91	89	85	82	82	....	80.0
	Minimum	60	55	60	47	49	61	60	55	50	61	55	53	62	59	52	41	40	41	50	53	49	52	61	65	56	52	63	64	64	53	....	54.8
Martinsburg§	Maximum	87	87	80	80	86	86	83	81	83	81	78	84	88	80	72	69	77	85	89	89	86	89	89	89	82	93	93	89	87	87	....	84.3
	Minimum	58	60	65	52	52	57	61	58	56	62	62	62	65	68	54	49	18	48	53	60	56	57	61	65	58	59	59	67	67	56	....	58.5
Moorfield	Maximum	90	88	86	81	82	89	88	77	80	83	82	90	91	85	71	68	79	89	90	87	87	90	93	91	87	99	96	93	84	88	....	86.1
	Minimum	58	56	62	46	63	61	62	58	51	62	57	56	56	63	63	39	40	41	48	53	51	54	60	60	57	66	44	62	64	53	....	55.5
Piedmont	Maximum	81	83	79	77	78	80	78	72	75	81	77	81	90	82	69	63	74	84	87	82	83	85	85	84	81	93	87	87	80	82	....	80.7
	Minimum	59	55	60	46	49	61	59	51	49	60	39	53	61	63	55	43	40	42	51	54	50	52	60	43	53	53	63	61	67	53	....	53.5
Romney	Maximum	88	90	81	87	81	86	85	82	80	83	83	86	94	82	75	68	79	87	91	86	86	90	90	91	89	97	93	92	82	85	....	85.6
	Minimum	58	55	62	47	54	60	60	57	51	61	58	55	62	62	54	40	38	40	50	53	56	52	60	60	54	53	65	60	64	57	....	55.3
Upper Tract	Maximum	83	81	80	80	83	87	83	....	83	84	80	90	90	87	86	80	83	84	84	80	80	81	81	86	84	88	93	90	87	85	....	84.2
	Minimum	62	54	60	60	42	43	59	....	56	55	48	51	50	62	60	37	36	38	50	57	58	49	48	51	61	54	52	59	62	50	....	52.6
Northern Division.																																	
Bens Run	Maximum	80	82	69	83	75	85	80	73	78	80	69	84	89	75	62	65	75	82	83	83	83	84	87	82	82	92	86	86	78	83	....	79.8
	Minimum	57	57	58	48	56	62	60	57	56	59	60	54	59	56	50	44	43	49	54	62	54	58	62	65	56	58	67	65	65	58	....	57.0
Buckhannon	Maximum	82	79	71	71	76	82	79	75	74	73	71	79	86	80	65	60	69	77	82	77	79	81	84	83	78	88	85	85	76	81	....	77.6
	Minimum	60	55	55	55	54	60	61	56	50	58	59	51	59	60	50	43	39	43	50	55	52	54	52	67	56	48	65	63	65	55	....	55.0
Creston	Maximum	79	82	70	84	74	87	83	70	78	81	72	85	90	85	66	66	81	87	87	86	84	88	89	85	85	90	87	86	80	87	....	81.8
	Minimum	57	56	59	48	55	60	60	57	53	58	60	53	60	58	51	42	41	44	50	59	52	56	63	66	56	54	65	61	65	56	....	55.8
Elkins	Maximum	80	80	69	81	77	86	77	71	74	75	72	82	89	70	58	56	70	79	82	78	79	82	86	80	79	90	85	86	74	79	....	77.5
	Minimum	56	54	51	45	52	60	60	53	49	57	57	55	56	56	43	39	36	41	47	52	48	51	58	62	55	51	60	61	58	53	....	52.5
Fairmont§	Maximum	83	84	71	83	75	85	81	69	76	80	73	86	91	77	62	65	78	84	88	85	85	85	90	85	85	94	89	89	79	....	....	81.3
	Minimum	57	57	60	48	54	62	62	56	53	59	60	55	58	59	53	41	42	44	51	56	52	55	62	66	53	57	67	65	65	54	....	56.1
Glenville	Maximum	85	86	72	87	84	89	88	83	77	81	83	87	93	92	80	68	78	86	89	86	87	89	94	93	90	97	97	91	88	87	....	86.2
	Minimum	57	59	61	49	55	60	60	58	52	59	60	55	60	58	51	41	41	45	50	55	51	55	64	67	56	59	63	62	65	56	....	56.1
Grafton	Maximum	74	68	68	75	75	71	77	77	69	73	73	79	81	80	68	56	70	70	76	76	74	72	78	78	78	88	93	90	85	85	75	....	75.4
	Minimum	54	54	62	49	53	63	62	58	53	66	58	54	58	58	51	43	42	44	49	56	51	54	63	66	54	56	66	63	66	53	....	56.0
Lost Creek	Maximum	80	77	65	76	75	80	86	76	71	76	71	74	85	80	68	63	78	85	78	83	84	85	87	83	82	90	86	86	80	82	....	79.1
	Minimum	57	54	61	45	54	55	60	62	51	57	55	53	56	60	50	49	37	45	53	48	52	55	54	64	54	53	64	60	65	53	....	54.2
Mannington	Maximum	79	79	75	76	75	83	78	75	71	74	74	80	87	84	70	59	71	79	84	79	79	82	85	80	78	89	87	85	83	80	....	78.7
	Minimum	56	57	59	46	52	57	60	55	52	58	58	54	55	57	51	40	40	42	48	54	49	53	60	62	52	54	65	64	64	51	....	51.2
Morgantown	Maximum	80	81	74	86	74	84	79	75	76	81	81	86	90	81	76	62	83	85	84	87	85	84	88	87	87	94	88	89	78	87	....	82.6
	Minimum	59	59	59	47	58	62	60	59	57	60	60	52	59	56	49	42	40	46	54	60	51	59	62	68	52	57	65	64	63	55	....	56.5
New Cumberland	Maximum	77	78	73	76	72	83	79	74	75	78	75	82	87	82	61	59	73	80	86	81	82	84	83	78	78	89	84	82	74	82	....	78.2
	Minimum	59	59	55	44	51	60	62	59	51	60	57	52	54	55	46	38	37	47	55	61	50	50	60	62	49	56	56	54	63	55	....	54.0
New Martinsville	Maximum	80	83	74	81	76	85	81	77	75	80	71	84	88	84	80	68	75	82	82	83	82	82	86	82	82	90	86	90	90	84	....	81.4
	Minimum	58	60	58	49	55	62	60	57	55	60	60	56	58	72	51	43	44	46	51	58	52	56	62	62	56	57	67	65	67	56	....	57.1
Parkersburg	Maximum	82	82	68	80	77	86	82	72	76	77	69	82	90	79	60	63	74	83	83	82	83	84	88	81	80	93	87	85	76	83	....	79.6
	Minimum	61	59	56	48	61	63	62	59	59	62	59	53	59	56	49	44	41	50	56	60	57	58	65	65	59	59	65	63	63	59	....	57.7
Parsons	Maximum	80	70	77	77	75	84	76	69	75	81	75	86	71	59	58	70	78	83	77	78	80	83	81	78	89	82	84	75	76	78	....	76.8
	Minimum	55	44	46	46	46	58	57	50	53	53	52	55	57	48	40	39	40	44	48	57	50	54	60	51	50	57	59	59	60	53	....	51.5
Philippi	Maximum	83	84	87	79	75	85	84	82	83	85	78	82	89	84	83	79	96	87	86	85	85	89	83	80	84	88	90	98	96	95	....	85.5
	Minimum	55	53	43	55	59	55	51	52	50	51	50	56	52	50	....	....	....	....	....	....	....	....	....	....	....	52	58	58	60	....	....	53.3
Pickens	Maximum	82	85	78	83	72	89	78	68	69	79	66	83	92	68	54	54	75	83	84	75	75	80	86	75	80	91	84	83	69	74	....	77.1
	Minimum	55	52	55	43	53	47	57	40	48	53	55	48	60	50	45	43	35	42	42	50	48	49	57	61	58	52	58	55	56	50	....	50.6
Terra Alta	Maximum	74	75	71	75	71	78	71	68	72	70	69	76	82	80	60	56	67	75	79	78	74	77	79	78	73	84	79	80	74	74	....	74.0
	Minimum	57	55	53	39	51	59	57	54	50	52	50	48	55	53	45	39	35	42	48	46	46	53	58	64	49	52	62	60	56	53	....	51.4
Wellsburg	Maximum	74	77	70	75	70	80	76	71	73	75	72	78	84	79	62	58	70	77	82	78	78	79	81	78	75	85	81	80	71	78	....	75.6
	Minimum	60	58	55	48	57	60	60	59	57	59	56	55	59	55	45	40	40	51	57	60	54	61	61	63	52	59	65	63	64	59	....	56.4
Weston	Maximum	81	81	76	78	78	87	82	78	79	78	77	82	89	88	70	63	72	80	83	82	78	81	84	83	80	91	90	87	81	81	....	80.7
	Minimum	61	56	62	47	58	62	....	....	....	....	60	53	59	59	50	43	41	44	52	56	52	55	63	71	58	55	66	61	65	54	....	56.3
Wheeling§	Maximum	82	84	71	85	79	88	84	72	77	84	75	88	94	80	60	68	81	90	90	90	85	89	90	83	86	95	87	90	79	87	....	83.1
	Minimum	59	59	59	50	50	60	62	59	59	60	58	58	59	57	52	40	43	46	53	61	52	55	61	65	55	58	60	62	65	55	....	56.4
Southern Division.																																	
Beckley	Maximum	83	84	84	83	84	87	78	76	78	79	79	84	74	75	69	70	78	80	84	83	80	82	84	85	86	90	88	85	78	80	....	80.9
	Minimum	46	46	45	40	45	56	48	51	50	51	50	50	47	50	45	36	43	46	55	42	52	54	54	54	54	55	61	56	50	52	....	49.5
Bluefield	Maximum	81	80	....	78	80	81	81	78	78	75	72	69	83	82	77	75	75	77	78	75	75	77	83	82	83	86	86	86	77	79	....	78.9
	Minimum	61	55	....	46	60	59	59	53	51	52	56	52	60	55	49	44	31	44	53	52	53	51	55	65	59	61	66	59	60	50	....	54.2
Charleston	Maximum	87	89	87	85	85	91	88	83	80	81	80	87	95	90	85	82	78	89	90	89	87	90	91	90	89	99	97	94	89	88	....	87.9
	Minimum	60	62	62	60	61	61	60	59	62	53	63	54	62	55	53	52	43	46	54	60	55	60	61	68	67	61	65	64	61	59	....	58.8
Elkhorn	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Green Sulphur Spgs.	Maximum	85	80	77	78	81	86	82	85	84	74	86	87	89	78	77	71	78	83	82	81	81	82	84	89	89	94	91	90	87	89	....	83.4
	Minimum	60	61	58	58	62	61	60	61	59	58	60	64	65	57	59	50	48	44	44	52	59	62	60	65	70	62	67	69	65	60	....	59.3
Hinton §	Maximum	88	83	80	80	85	89	80	70	75	78	79	86	90	74	65	63	76	83	83	83	79	82	91	87	87	95	93	90	82	83	....	82.0
	Minimum	57	57	58	50	51	57	60	51	54	56	58	56	54	63	52	44	41	44	49	54	55	58	58	59	61	62	61	63	65	56	....	55.1
Holcomb §	Maximum	82	82	72	81	77	87	79	78	79	76	76	84	90	71	62	76	72	82	83	80	81	83	88	87	82	92	90	89	77	83	....	80.7
	Minimum	52	52	56	45	51	53	57	46	49	50	46	47	55	57	48	39	33	36	44	48	45	48	51	56	58	50	55	55	50	53	....	49.5
Huntington §	Maximum	81	83	72	84	79	86	85	77	81	81	71	87	93	78	62	69	78	87	81	85	76	86	92	85	88	97	93	92	83	88	....	82.7
	Minimum	60	61	60	51	51	54	62	64	59	61	63	55	59	57	....	....	....	....	....	....	....	56	62	70	64	64	70	61	68	60	....	60.7
Lewisburg	Maximum	84	80	74	77	81	85	79	72	74	77	77	85	86	82	66	60	73	79	81	77	78	82	85	84	80	89	88	85	79	78	....	79.2
	Minimum	54	54	58	44	51	56	59	48	48	57	52	51	59	59	48	39	34	46	47	50	49	55	52	58	56	55	57	58	61	48	....	51.8
Madison §	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Marlinton	Maximum	76	74	68	74	70	78	74	68	66	68	72	78	82	66	58	56	70	76	74	72	74	76	80	76	71	86	82	84	72	74	....	75.3
	Minimum	50	52	50	42	48	58	52	44	46	54	52	50	54	52	44	38	34	40	44	46	48	52	54	56	52	59	54	60	52	48	....	49.2
Point Pleasant	Maximum	85	84	73	82	78	88	84	75	79	80	71	84	93	82	61	68	76	85	85	85	83	86	90	84	85	95	91	88	80	86	....	82.3
	Minimum	58	58	56	46	56	62	59	60	56	59	60	51	58	54	49	43	41	46	53	56	54	56	62	57	55	56	65	60	65	56	....	55.6
Powellton	Maximum	84	85	78	83	86	90	82	77	75	76	77	86	92	83	71	64	80	84	85	81	80	85	90	87	86	95	93	90	82	84	....	83.0
	Minimum	59	60	62	49	60	62	62	53	54	65	53	56	60	58	51	45	42	41	51	57	54	56	58	62	61	57	61	65	65	55	....	56.5
Robertsburg§	Maximum	82	84	68	83	81	89	81	77	82	82	70	85	92	78	62	68	79	89	85	82	85	86	91	83	89	95	91	90	87	86	....	82.7
	Minimum	58	59	59	48	53	63	61	60	57	61	62	53	59	56	52	45	42	47	53	57	54	57	53	60	57	59	65	62	66	57	....	56.5
Ryan	Maximum	85	84	73	72	71	84	83	76	79	72	73	85	87	76	62	65	75	78	84	89	86	90	90	86	88	90	90	90	80	81	....	80.8
	Minimum	55	52	55	50	53	50	59	52	51	58	57	57	58	55	50	41	38	46	49	57	55	58	58	65	55	60	60	61	61	53	....	54.3
Spencer§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Union §	Maximum	81	79	82	80	85	80	82	75	79	81	85	82	80	81	79	79	83	88	81	82	83	82	84	87	92	90	88	79	82	....	....	82.4
	Minimum	49	52	49	46	47	49	48	50	49	49	52	55	52	49	48	39	37	42	50	51	54	57	56	59	60	62	68	67	63	49	....	51.9
White Sulphur Spgs.	Maximum	86	82	77	77	81	87	83	77	75	79	80	85	88	85	67	65	75	82	83	82	82	84	88	86	86	88	90	89	81	83	....	81.8
	Minimum	45	55	57	45	46	49	57	45	50	58	54	54	58	56	46	38	35	56	44	57	52	54	62	55	58	59	50	49	61	50	....	51.8
Williamson §	Maximum	85	83	75	81	78	87	80	70	78	74	78	85	81	74	59	65	76	81	84	81	74	84	89	84	86	84	92	91	80	85	....	80.2
	Minimum	63	60	63	55	57	60	62	55	59	60	63	61	63	68	55	48	46	48	52	57	60	62	63	66	67	62	65	64	67	60	....	59.7

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

1.05
N VVE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JULY, 1917

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
AUGUST 25, 1917

Departure of the Mean Temperature from the Normal, July, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (—).
Lines show amount of excess or deficiency.

G

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXV. PARKERSBURG, W. VA., JULY, 1917. No. 7.

GENERAL SUMMARY.

While July was somewhat wetter and cooler than usual, the weather for the month was especially characterized by a protracted period of cool weather and by frequent showers. The temperatures were below the normal or only slightly above in most sections of the State for about 24 days. While some localities were too wet for cultivation and favorable crop growth, rain was needed in nearby localities. Many of the showers were especially local. On the 25th light to moderate rain fell in Parkersburg for 40 minutes while the sun shone brightly. In sections not more than one-half of a mile apart, the rainfall ranged from a trace to probably about one-third of an inch. For the locality, considering the duration of the storm and the amount of the rainfall during bright sunshine, this storm probably made a record. Notwithstanding the unfavorable conditions during most of the month, crops made good growth. Corn made especially rapid progress during the last week, when the conditions were also favorable for the harvesting of hay and oats.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 29.99 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.15 inches on the 20th, and 29.63 inches on the 12th. Elkins, 30.20 inches on the 20th, and 29.64 inches on the 12th.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 72.6°. The mean departure from the normal for 39 stations having ten or more years of record was —0.7°. The month opened with the temperature slightly above the normal and plus departures were also quite general after the 21st. The last three days were abnormally warm. The weather was generally seasonally cool from the 3d to the 21st.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 84 per cent; 8 p. m., 76 per cent. The July averages for the same hours for the past 29 years are 82 and 69 per cent, respectively. Elkins, 8 a. m., 85 per cent; 8 p. m., 77 per cent. The July averages for Elkins for the same hours for the past 17 years are 87 and 78 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 63 stations reporting, was 4.83 inches. The departure from the normal for 44 stations having ten or more years of record was + 0.24 inch. The rainfall was heaviest over the central and southern mountain districts, northwest counties, and sections of Jefferson County, and lightest over the southwestern counties, Monongahela Basin, and portions of the eastern panhandle counties. There were widely scattered showers on the 2d and 3d and showers occurred daily in many sections from the 7th to the 27th, with the greatest rainfalls occurring on the 8th, 10th, 14th-18th, 22d, and 25th-26th.

WIND.

The average wind velocity at Parkersburg was 4.3 miles per hour, or 0.1 mile above the July average for 27 years. The average at Elkins was 2.9 miles per hour, or 0.1 mile below the July average for 17 years. The highest velocity at Parkersburg was 27 miles per hour from the northwest on the 26th, and at Elkins 17 miles per hour from the west on the 7th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 57 per cent of the possible amount, or 2 per cent above the July average for 20 years. The average at Elkins was 50 per cent, or 4 per cent below the July average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 9th, 20th, 29th, and 31st; Bayard, 23d; Brandywine, 9th. 24th, and 25th; Creston, 25th; Elkins, 5th, 13th, 18th, 19th, 20th, 21st, 24th, 26th, 28th, 29th, and 30th; Grafton, 3d and 13th; Hinton, 20th and 28th; Holcomb, 28th, 30th, and 31st; Mannington, 3d, 9th, 13th, 18th, 19th, 20th, 21st, 23d, 24th, 29th, 30th, and 31st; Marlinton, 1st, 9th, 28th, 29th, and 30th; New Cumberland, 3d, 4th, 6th, 19th, 20th, 21st, 23d, 24th, and 26th; Parkersburg, 9th; Robertsburg, 19th; Romney, 20th, 21st, 23d, 24th, and 28th; Rowlesburg, 19th, 20th, 21st, 28th, and 29th; Smithfield, 30th and 31st; St. Marys, 3d, 9th, 13th, and 20th.

Hail: Camden-on-Gauley, 22d; Creston, 18th: Romney, 10th; Smithfield, 13th; Wheeling, 9th.

Halos, solar: Wellsburg, 4th, 5th, and 19th.

Thunderstorms (dates and number of stations reporting): 1st, 2; 2d, 5; 3d, 1; 6th, 4; 7th, 9; 8th, 4; 9th, 11; 10th, 6; 12th, 5; 13th, 4; 14th, 11; 15th, 6; 16th, 5; 17th, 4; 18th, 12; 19th, 3; 20th, 5; 21st, 3; 22d, 6; 23d, 4; 24th, 5; 25th, 9; 26th, 10; 27th, 3.

COMPARATIVE DATA FOR JULY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	67.5	..	....	5.59	....	....	....	..	..	..
1892	73.4	98	41	4.20	....	....	....	..	..	..
1893	73.8	98	42	2.96	5.95	1.37	....	20	10	1
1894	73.3	100	36	2.21	4.84	0.50	....	10	19	2
1895	70.5	99	39	4.35	7.04	1.65	....	11	13	7
1896	73.3	97	46	9.07	15.70	2.91	....	9	12	10
1897	74.2	102	46	5.43	9.92	2.85	....	11	12	8
1898	75.0	103	40	4.46	8.33	1.53	....	12	7	12
1899	73.3	100	33	3.78	7.92	0.20	....	14	10	7
1900	74.7	104	41	4.38	7.88	1.72	....	15	11	5
1901	77.4	104	47	3.16	6.21	0.69	....	14	12	5
1902	74.2	104	45	3.54	8.42	0.96	....	14	12	5
1903	72.5	100	37	3.74	8.30	1.82	....	16	10	5
1904	71.5	97	42	3.28	6.00	1.04	....	14	12	5
1905	73.3	98	43	5.92	10.64	3.00	....	12	11	8
1906	72.4	98	45	4.54	7.40	1.50	....	12	11	8
1907	72.7	98	42	6.66	13.36	1.99	....	12	14	5
1908	74.0	100	41	5.21	9.43	2.08	....	14	13	4
1909	70.2	96	36	4.17	10.50	0.60	....	14	11	6
1910	73.8	98	41	4.92	13.16	0.54	....	13	12	6
1911	73.3	106	40	2.82	6.94	0.40	....	16	12	3
1912	72.0	100	45	7.48	15.22	2.67	....	12	12	7
1913	74.2	103	40	5.80	10.07	2.14	....	15	12	4
1914	73.1	106	38	4.11	7.74	0.98	....	16	10	5
1915	71.9	99	38	4.63	11.31	1.82	....	12	11	8
1916	74.8	102	42	3.49	9.47	1.06	....	16	8	7
1917	72.6	104	44	4.83	8.27	1.25	....	14	10	7
Means and extremes ..	73.1	106	33	4.62	15.70	0.20	....	14	11	6

Climatological Data for July, 1917.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	67.6	−0.3	86	1	49	5	33	4.95	+0.04	1.80	0	16	7	7	17	w.	G. C. Dixon.
Brandywine	Pendleton		0	72.1		96	31	47	1	46	2.49		0.77	0	11	18	9	4	sw.	Elmer Keister.
Burlington	Mineral	875	22	73.2	+0.4	96	31	53	4†	34	3.73	+0.12	1.33	0	7	7	24	0	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27								8.27	+4.94	1.68	0	16				e.	S. W. Lightner.
Martinsburg	Berkeley	435	24	76.6	−0.4	101	31	60	5	33	3.79	−0.16	0.90	0	11	15	11	5	s.	G. W. Van Metre, C. E.
Moorefield [b]	Hardy	900	20	76.7	+2.8	104	30†	52	4	47	1.25	−2.22	0.27	0	10	27	2	0		M. S. Henkel.
Piedmont	Mineral	919	0	72.4		94	31	52	5†	37	4.11		1.69	0	16	9	13	9	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	19	75.2	0	100	31	53	5	41	3.07	−0.45	1.54	0	9	4	27	0		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	72.6	+0.2	94	30†	49	4†	42	5.53	+1.87	2.40	0	9	23	5	3	w.	J. M. Mallow.
Averages and	extremes			73.3	+0.4	104	30†	47	1	47	4.13	+0.59	2.40	0	12	14	12	5	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	73.8	−1.5	95	25	56	5	32	4.96	+0.35	1.20	0	14	19	8	4		J. D. Riggs.
Brandonville	Preston	1,809	6								4.99		1.54	0	11					W. T. Miller.
Buckhannon	Upshur	1,411	20	70.8	−1.6	89	31	51	5	30	5.90	+0.60	1.04	0	16	18	6	7		H. A. Darnall,
Central Station	Doddridge	950	19																	D. H. Doak.
Cortland	Tucker	3,300	1								2.73		0.80	0	8					Samuel Harmon
Creston	Wirt	701	15	73.6	−1.2	96	31	54	5	33	6.57	+2.77	1.62	0	11	14	10	7	sw.	J. M. Reed.
Davis	Tucker	3,093	8								6.66		1.22	0	17	15	5	10	sw.	Ross C. Male.
Elizabeth††	Wirt	646	5								7.54		2.02	0	8					E. D. Ball.
Elkins	Randolph	1,940	16	70.4	−0.2	90	31	49	5	37	2.69	−1.95	0.61	0	17	2	11	18	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	74.6	+0.1	96	6†	55	5	38	4.13	−0.70	1.55	0	11	23	4	4	w.	F. P. Hall.
Glenville	Gilmer	738	23	76.0	+1.2	98	7†	55	4†	39	4.09	−1.38	0.87	0	13	15	14	2	w.	M. T. Brannon.
Grafton	Taylor	1,000	24	70.7	−2.2	95	30	53	5	31	6.95	+2.02	3.00	0	10	15	6	10	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	72.2	−0.3	93	31	49	5	36	4.97	+0.25	2.20	0	12	11	11	9	w.	Allen Smith.
Mannington	Marion	974	14	71.2	−1.4	90	30†	51	5	33	5.43	+0.78	1.11	0	12	14	8	9	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	74.0	+0.4	95	31	52	5	37	3.54	−1.61	1.00	0	13	14	2	15	sw.	R. W. Muldoon.
Moundsville	Marshall	642	14	75.5	+1.0	95	6†	55	3	35	5.95	+1.43	1.11	0	10	21	4	6	se.	M. Z. White.
New Cumberland	Hancock	987	19	71.4	−1.6	94	31	47	4	37	4.30	−0.19	0.69	0	11	9	19	3	sw.	M. F. Smith,
New Martinsville	Wetzel	634	23	73.6	−2.0	96	31	52	6	40	5.35	+0.52	1.40	0	15	12	10	9	s.	Wm. Ankrom,
Parkersburg	Wood	638	28	74.4	−1.2	94	31	57	3	30	6.17	+1.51	1.66	0	15	13	11	7	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	69.7	−0.7	90	31	49	4	39	3.45	−1.75	0.91	0	8	11	12	8		J. W. Swisher.
Philippi††	Barbour	1,149	20	70.0	−2.9	92	31	45	13	44	4.77		2.00	0	7	17	11	3	w.	Okey J. Robinson.
Pickens	Randolph	2,697	14	66.8[a]	−2.0	85[a]	31	50[a]	4†	32[a]	7.28	+1.01	2.30	0	16	15	11	5	w.	Dr. J. L. Cunningham,
Rowlesburg	Preston	1,375	30								5.22	+0.42	1.50	0	11					J. F. Pierce.
Saint Marys	Pleasants	577	8								5.48		1.05	0	14					Wm. Hughes.
Smithfield	Wetzel	835	11	72.0	−0.4	98	24	51	5	39	7.67	+2.30	2.05	0	16	24	6	1	w.	G. M. Whisler.
Terra Alta	Preston	2,612	16	67.6	−2.0	85	31	51	22	28	4.73	−1.01	2.00	0	13	14	16	1	w	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	71.0	−0.9	89	31	51	4	27	4.51	−0.07	0.73	0	12	11	10	10	sw.	C. P. Waugh.
Weston	Lewis	1,026	21	73.4	−1.3	94	30	52	3	35	4.18	+0.90	0.75	0	15	7	24	0		Weston State Hospital.
Wheeling	Ohio	645	30	75.0		102	31	54	5	39	8.17	+3.59	3.13	0	14	16	7	8	sw.	Miss M. B. Forsyth.
Averages and	extremes			72.3	−0.9	102	31	47	4	44	5.23	+0.45	3.13	0	13	14	10	7	w.	
Southern Division.																				
Bancroft	Putnam	574	12	73.7	−1.9	94	31	55	4	32	3.61	−0.74	0.73	0	12	20	0	11	ne.	R. E. Dent.
Beckley	Raleigh	2,440	16	70.4	−1.1	92	30	49	10	35	3.87	−0.28	1.18	0	6	13	10	8	w.	John A. Ewart.
Bluefield†† [a]	Mercer	2,558	21	70.3	−1.6	88	31	52	5†	30	5.13	+0.64	1.22	0	13	13	4	13		Norfolk & Western Ry
Camden-on-Gauley	Webster	2,062	1								7.03		2.00	0	8	17	8	6	s.	C. A. Droddy.
Charleston	Kanawha	597	13	76.6	+0.1	98	31	57	5	34	5.08	+0.95	1.78	0	9	22	2	7	e.	C. V. Lewis.
Clay	Clay	706	0								1.91		0.28	0	12					Prof. E. H. Knabenshue
Cuba ††	Jackson	650	14	73.6	+0.1	96	31	52	13	35	4.82	+0.69	0.85	0	15	9	22	0	w.	Frank Allen.
Dam 19 O. R.	Wood	557	0								4.65		0.83	0	13					Lockmaster.
Dam 20 O. R.	Wood	551	0								4.82		0.99	0	13					Lockmaster.
Dam 22 O. R.	Jackson	538	1								7.64		1.65	0	14					U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0								5.38		0.96	0	11					U. S. Engineer Office.
Dunlow	Wayne	703	8																	James W. Damron.
Elkhorn	McDowell	1,933	23																	J. J. Lincoln.
Evans	Jackson	606	0	74.0		92	31	53	11	28	4.48		1.27	0	12	16	0	15		B. F. Sayre,
Gary	McDowell	1,426	0								7.59		1.39	0	18					U. S. Coal & Coke Co.
Green Sulphur Spgs.	Summers	1,600	20	74.4	+2.0	94	31	60	1†	30	4.50	+0.71	1.45	0	12	14	4	13	w.	W. H. Gwinn.
Hinton	do	1,450	19	73.6	−0.9	95	30	54	4	36	5.02	+1.31	1.34	0	17	8	3	20	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	24	69.7		91	31	47	4†	41	7.86		1.62	0	15	13	5	13		R. C. Ferguson.
Huntington	Cabell	538	0	75.9	−0.8	98	31	59	13†	31	2.26	−2.11	0.60	0	7	12	3	16	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	0								5.19		0.96	0	12					Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	16	70.4	−0.9	90	31	49	1†	37	3.45	−0.38	0.71	0	11	12	15	4	sw.	Geo. T. Argabate.
Logan	Logan	687	13																	Agent C. & O. Ry.
Madison	Boone	704	10																	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	66.3	−2.5	86	31	44	5	36	7.22	+2.13	1.76	0	16	3	11	14	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23																	Miss Donna Tully.
Point Pleasant	Mason	553	23	74.0	−2.6	96	31	53	5†	35	4.68	+0.66	0.92	0	12	15	10	6	sw.	W. D. Holmes.
Powellton	Fayette	933	20																	S. C. Lampert.
Rainelle	Kanawha	2,425	0																	A. L. Guthrie.
Raleigh	Beckley	2,130	0								4.40		0.64	0	14					Raleigh Coal & Coke Co.
Renick	Greenbrier	1 653	0								2.13		1.00	0	4					Wm. B. Hill.
Robertsburg	Putnam	574	16	74.6	−1.1	94	6†	57	5	35	4.23	+0.36	1.10	0	12	13	8	10		E. C. Brace, Jr.
Ryan	Roane	700	13	72.5	−0.9	95	30†	52	5	37	3.77	−1.03	1.10	0	12	10	16	5		Wm. E. Ryan,
Sissonville ††	Kanawha	625	0								4.49		0.80	0	10					J. N. Johnson.
Spencer	Roane	784	12								2.95	−1.50	1.25	0	6	4	24	3		A. M. McKown.
Sutton	Braxton	839	10								4.40	−0.48	1.70	0	9					C. B. Eakle.
Union	Monroe	2,250	12	71.0[a]	0	93[a]	29	50	1†	39[a]	3.27	−1.26	0.65	0	9					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	70.6		94	31	48	2†	12	6.60		1.45	0	14	18	8	5		J. M. Ayres.
Williamson	Mingo	660	16	75.4	−0.5	94	29†	60	4†	30	2.94	−1.66	0.82	0	12	14	12	5	w.	J. F. Keyser.
Averages and	extremes			72.7	−0.9	98	31	44	5	42	4.68	−0.22	2.00	0	12	13	8	10	w.	
State averages and	extremes			72.6	−0.7	104	30†	44	5	47	4.83	+0.24	3.13	0	12	14	10	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

r Approximated by the observer.

Daily Precipitation for July, 1917.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
ayard	Potomac	....	.46	....	....	....	.03	.04	.16	.84	.11	.08	.03	....	1.01	.79	T.	.08	.49	....	.12	....	.55	....	....	....	.05	.11	....	....	....	....	4.95
andywine	....do	....	....	.18	....	....	....	....	.24	....	.12	....	....	....	T.	.05	.45	.32	....	.02	.05	....	T.	T	.12	.34	.60	....	....	....	....	....	2.49
rlington	....do	....	....	....	....	....	....	.65	T.	.30	....	....	....	.15	.45	T.	T.	.85	1.00	.33	....	....	....	....	....	T.	T.	....	....	....	....	....	3.73
arpers Ferry ‖‖	....do	....	....	.20	.25	....	....	....	.55	.57	1.10	.05	.35	.05	....	.20	.15	.32	.65	1.35	....	....	....	....	....	1.48	.20	.80	....	....	....	....	8.27
artinsburg	....do	....	T.	.19	....	....	....	....	.58	.20	....	.67	....	.10	....	.33	.17	.05	.90	T.	....	....	....	....	T.	.05	.55	....	....	....	....	....	3.79
oorefield	....do	....	....	....	....	....	....	....	.15	.26	.12	....	....	....	.27	.10	.08	.07	.11	....	....	....	.07	....	....	....	....	.02	....	....	....	....	1.25
edmont	....do	....	.01	....	....	....	.19	.22	1.31	.13	.15	....	.04	....	.15	1.69	.03	.05	.03	....	.01	....	....	....	.05	.03	.02	....	....	....	....	....	4.11
omney	....do	....	....	....	....	....	....	....	1.54	.05	.25	.15	....	....	T.	.52	T.	T.	.05	T.	T.	....	.03	....	T.	.03	.45	....	....	....	....	....	3.07
oper Tract	....do	....	....	....	....	....	....	....	.30	....	.55	....	....	....	....	.10	.30	.15	.35	T.	T.	T.	.12	....	1.26	2.40	T.	....	....	....	....	....	5.53
Northern Division.																																	
ens Run	Ohio	....	.02	....	....	....	....	.27	....	....	.44	.06	.07	.02	.93	.77	.25	.12	.58	.09	....	....	....	....	....	.14	1.20	....	....	....	....	....	4.96
andonville ‖‖	Monongahela	....	....	....	....	....	....	....	.28	....	.22	....	.25	....	.66	1.54	....	.49	....	.05	....	....	....	....	....	.10	.10	.65	.65	....	....	....	4.99
ckhannon	....do	....	....	....	....	....	....	.40	....	.15	....	.52	.20	T.	.48	1.04	.35	.23	.55	.10	T.	.30	.10	....	.65	.10	.35	.38	T.	....	....	....	5.90
ntral Station	Middle Is. Creek	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
rtland ‖‖	Monongahela	....	....	....	....	....	....	....	....	.24	....	.38	....	.10	.18	.40	....	.20	.43	....	....	....	....	....	....	....	....	....	.80	....	....	....	2.73
eston ‖‖	Little Kanawha	....	....	....	....	....	....	1.36	....	.26	....	....	....	.27	.90	T.	.35	T.	1.62	....	....	....	.19	.03	....	....	.11	1.20	.28	....	....	....	6.57
avis ‖‖	Monongahela	....	T.	....	....	....	....	.25	.07	.52	.10	.33	.05	.16	.12	.75	.27	.22	.23	....	.60	1.22	1.02	.29	....	T.	T.	.46	....	....	....	....	6.66
izabeth ‖‖	Little Kanawha	....	....	....	....	....	....	....	1.43	....	.63	....	.16	....	.37	1.95	.68	.30	....	....	....	....	....	....	....	....	....	2.02	....	....	....	....	7.54
kins ***	Monongahela	....	....	....	....	....	T.	.59	.01	.05	.04	.04	T.	.01	.18	.61	.12	.09	.21	....	.26	T.	.18	T.	.01	.01	.11	.17	....	....	....	....	2.69
irmont ‖‖	....do	....	....	....	....	....	....	....	.40	....	.45	....	.08	....	.68	1.55	.19	.22	T.	.10	....	....	.02	T	....	....	....	.42	.02	....	....	....	4.13
enville ‖‖	Little Kanawha	....	....	....	....	....	....	....	.16	....	.12	.05	T.	....	.11	.60	.60	.24	.04	.87	....	....	.14	.58	....	....	.14	.44	....	....	....	....	4.09
afton	Monongahela	....	....	....	....	....	....	.61	....	.18	.47	....	....	....	.44	3.00	.04	....	.02	.21	....	....	....	....	....	....	1.34	.64	....	....	....	....	6.95
st Creek	....do	....	....	....	....	....	....	.16	....	.62	....	.44	T.	T.	.18	2.20	.04	.07	.10	.21	.05	....	T.	....	....	T	.32	.58	....	....	....	....	4.97
nnington	....do	....	....	....	....	....	....	.10	....	....	.71	.04	.03	....	1.10	.89	.33	.31	....	.15	....	....	.66	....	....	T.	.90	.21	....	....	....	....	5.43
rgantown	....do	....	T.	....	....	....	....	.06	....	....	.51	.02	.13	T.	.76	1.00	.19	.03	....	.06	....	....	.06	....	....	.25	.29	.18	..	....	....	....	3.54
undsville	Ohio	....	.50	....	....	....	....	....	.35	....	.90	....	....	....	.45	.30	....	1.00	.35	1.00	....	....	....	....	....	....	.70	.40	....	....	....	....	5.95
w Cumberland	....do	....	.58	....	....	....	....	.13	....	.62	.66	....	.25	.27	.32	T.	.02	.69	.26	..	....	....	.50	T.	....	T	T.	T.	....	....	....	....	4.30
w Martinsville	....do	....	.20	....	....	....	....	.50	....	.30	.93	.10	.05	....	1.40	.55	....	.15	.12	.08	....	....	.02	....	....	.15	.15	.65	....	....	....	....	5.35
arkersburg ***	Ohio	....	T.	T.	....	....	....	1.66	....	....	.56	T.	.06	.13	.28	.43	.22	.30	.32	....	1.27	.01	T.	T.	.05	.02	.31	.55	....	....	....	....	6.17
rsons	Monongahela	....	T.	.32	....	....	....	.55	.12	....	.49	T.	.15	....	.06	....	....	T.	T.	....	.91	....	....	....	T.	T.	.85	....	....	....	....	....	3.45
ilippi	....do	....	....	....	....	....	....	....	....	....	.50	.15	....	.56	.56	2.00	....	....	....	....	....	....	....	....	....	....	.75	.25	....	....	....	....	4.77
ckens	....do	....	T.	.05	....	....	....	.06	....	T.	....	.06	.08	....	.05	.75	.31	.40	.06	....	....	.35	1.95	.42	.20	1.72	.30	.52	....	....	....	....	7.28
wlesburg ‖‖	....do	....	....	....	....	....	....	....	1.09	T	.08	.38	T.	....	.46	1.50	.16	....	.04	.10	....	.14	....	.42	....	....	....	.85	....	....	....	....	5.22
int Marys ‖‖	Ohio,	....	....	T.	....	....	....	.10	.48	T	.84	.13	.10	T.	.55	.47	.35	.15	.05	.70	T.	....	....	T.	T.	....	1.05	.46	.05	T.	T.	....	5.48
ithfield ‖‖	Fishing Creek	....	....	.01	....	....	....	....	.12	....	.73	....	.20	.02	.90	1.08	.10	.21	.18	.07	....	....	2.00	.05	....	....	.07	1.36	.57	....	....	....	7.67
rra Alta	Monongahela	....	....	....	....	....	....	*	.15	....	....	.25	.18	....	.25	2.00	.15	.05	.10	....	....	....	.65	....	.10	.70	.15	....	....	....	....	....	4.73
llsburg	Ohio	....	.48	....	....	....	....	.09	....	.28	.70	....	.04	T.	.68	.10	.20	.73	.62	....	....	....	....	....	....	.28	.31	....	....	....	....	4,51
eston	Monongahela	....	....	....	....	....	....	.55	....	.35	.15	.10	....	.15	.58	....	.35	.15	.40	.20	....	....	.10	....	....	.10	.05	.75	.20	....	....	....	4.18
heeling ‖‖	Ohio	....	.25	....	T.	....	....	....	.38	.01	2.40	.21	.05	T.	.58	.26	..	.52	.10	.03	....	....	....	3.13	....	....	.06	.20	....	....	....	....	8.17
Southern Division.																																	
ncroft ‖‖	Great Kanawha	....	....	....	....	....	....	....	.40	..	.44	....	.15	....	....	.73	....	.63	....	.23	....	....	.05	.63	.18	.10	.04	.03	....	....	....	....	3.61
ckley	....do	....	.98	....	....	....	....	.23	....	....	....	....	....	....	....	.30	.49	....	1.18	....	....	....	.69	....	....	....	....	....	....	....	....	....	3.87
uefield	....do	....	....	.60	....	....	....	....	....	....	....	....	.35	....	.60	.05	.72	.37	.21	.04	....	.39	1.22	.03	.04	....	.51	....	....	....	....	....	5.13
nden-on-Gauley ‖‖	....do	....	....	....	....	....	....	....	....	....	....	....	1.00	....	2.00	1.00	.75	.92	....	....	....	.11	1.00	....	....	.25	....	....	....	....	....	....	7.03
arleston ‖‖	....do	....	....	....	....	....	....	T.	1.78	....	.15	....	.30	....	....	1.05	.10	.45	T.	.20	....	....	.35	....	....	.70	....	T.	T.	....	....	....	5.08
ay ‖‖	....do	....	....	....	....	....	....	....	....	....	....	.11	....	.16	.15	....	.12	.16	....	.22	....	.14	.26	.16	.13	T.	....	.09	.23	....	....	....	1.91
ba	Sand Creek	....	....	....	....	....	....	.80	.50	....	.60	....	.09	T.	.19	.85	.09	.19	.35	.12	....	....	.10	.15	....	.40	.29	.10	....	....	....	....	4.82
m 19 O. R. ‖‖	Ohio	....	.01	....	....	....	....	T.	.76	....	.64	....	.10	....	.55	.26	.01	.25	.03	.56	....	....	....	.03	....	....	.62	.83	....	....	....	....	4.65
m 20 O. R. ‖‖	....do	....	....	....	....	....	....	.03	.99	....	.27	....	....	....	.45	.41	.32	.38	.10	.61	....	....	.53	....	.03	..	....	.55	.15	....	....	....	4.82
m 22 O. R. ‖‖	....do	....	....	....	....	....	....	.24	1.65	....	.82	....	.06	....	.08	1.09	.01	.28	.18	.60	....	.77	.93	.10	....	....	.83	....	....	....	....	....	7.64
m 26 O. R. ‖‖	....do	....	....	....	....	....	....	T.	.28	....	.15	....	.70	....	....	.75	.77	.25	.20	.47	....	....	.40	....	....	.96	....	.45	....	....	....	....	5.38
nnlow	Big Sandy	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
khorn	....do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
ans	Ohio	....	....	....	....	....	....	1.27	.23	....	.54	....	.03	T.	.03	.06	.20	.21	1.24	.12	....	....	.37	....	....	....	.18	....	....	....	....	....	4.48
ry ‖‖	Big Sandy	....	.79	....	....	....	.32	.20	.12	....	.24	....	.47	....	.77	.40	.50	.17	1.39	....	....	.20	1.00	.13	.10	.03	.75	.01	....	....	....	....	7.59
een Sulphur Spgs.	Great Kanawha	....	....	1.45	....	....	....	....	....	....	....	....	....	T.	.50	.22	.20	.25	.23	.35	.20	....	....	.25	.33	.20	.32	....	....	....	....	....	4.50
nton ‖‖	....do	....	....	.38	....	....	....	....	.14	.02	....	....	.08	.46	....	.50	.72	.10	.20	.50	....	....	.20	.18	.10	1.08	.26	.04	.06	....	....	....	5.02
lcomb	....do	....	.29	....	....	....	....	.24	....	....	....	....	*	1.02	*	.70	....	1.57	.87	.13	....	*	1.62	.18	.12	.37	.75	....	....	....	....	....	7.86
ntington ‖‖	Ohio	....	....	....	....	....	....	.42	T.	....	....	....	.20	....	T.	.40	T.	.04	....	T.	T.	....	.60	T	....	....	.02	....	.08	....	....	....	2.26
aylord ‖‖	Great Kanawha	....	....	.58	....	....	....	....	.96	....	.05	.03	....	....	....	.16	.72	.30	.65	....	....	....	.79	....	.46	....	.50	.04	T.	....	....	....	5.19
ewisburg	....do	....	.13	.47	....	....	....	....	....	....	....	....	....	.20	T.	.10	.47	.66	.35	.04	....	....	.71	T.	T.	.29	.03	....	....	....	....	....	3.45
gan	Guyandotte	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
adison ‖‖	Great Kanawha	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
rlington	....do	....	1.76	.15	....	....	....	.20	.06	..	.02	....	.80	....	T.	.04	.64	.76	.04	T	T.	.86	.36	.04	.88	.44	.11	....	....	....	....	....	7.22
ttallburg	....do.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
int Pleasant ‖‖	Ohio	....	....	....	....	....	....	....	.92	....	.51	....	.12	....	.04	.90	.07	.80	.20	.42	....	....	.37	....	....	.18	....	.15	....	....	....	....	4.68
wellton		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
inelle ‖‖	Great Kanawha	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
leigh ‖‖	....do	....	....	.64	....	....	....	....	.23	....	....	....	.08	.48	....	.47	.35	.55	.06	.14	....	....	.56	.48	.06	.04	....	.26	....	....	....	....	4.40
nick ‖‖	....do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.03	....	1.00	....	....	....	....	.40	....	....	.70	....	....	....	....	....	....	2.13
obertsburg ‖‖	....do	....	....	....	....	....	....	....	.15	....	.75	....	.44	....	....	1.10	.25	.39	.15	.30	....	....	.23	....	.04	....	.10	.33	....	....	....	....	4.23
yan	....do.	....	....	....	....	....	....	.37	.03	....	....	.15	.23	T.	.01	1.10	.52	.17	.10	....	....	T.	....	T.	.75	....	.32	....	.02	....	....	....	3.77
ssonville ‖‖	....do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
encer ‖‖	Little Kanawha	....	....	....	....	....	....	1.25	....	....	T.	....	....	....	....	T.	....	.10	.20	T.	....	.10	....	....	T.	....	....	.70	.60	....	....	....	2.95
tton ‖‖	Great Kanawha	....	....	....	....	....	....	....	1.70	....	....	....	.10	....	....	.70	.10	.10	....	....	1.10	.05	.15	....	....	....	....	.40	....	....	....	....	4.40
nion ‖‖	....do	....	.50	....	....	....	....	....	T.	....	T.	....	.35	....	.20	.32	.65	....	.55	....	....	....	.25	.40	.05	....	....	....	....	....	....	....	3.27
hite Sulphur Spgs.	....do	....	....	.35	....	....	....	....	....	....	....	....	.20	.10	T.	.20	.55	.70	.35	T.	.75	.20	1.35	.30	1.45	T.	.05	.05	....	....	....	....	6.60
illiamson ‖‖	Big Sandy	....	....	....	....	....	....	.07	....	....	.06	....	.29	....	....	.54	.82	.64	.05	....	....	....	.08	.02	.18	....	.12	....	.07	....	....	....	2.94

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for July, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	86	84	78	74	82	83	78	79	79	74	72	74	75	78	73	75	75	73	78	76	82	76	84	80	82	78	72	82	83	85	84	78.5
	Minimum	53	62	53	50	49	50	53	59	53	54	54	56	55	56	54	58	60	60	55	54	56	54	64	59	58	54	61	65	69	68	56.8
Brandywine	Maximum	93	93	83	80	84	86	81	84	83	84	76	85	86	88	82	83	84	82	85	86	85	83	87	88	84	88	85	86	92	95	96	85.7
	Minimum	47	58	62	50	52	54	57	61	62	54	54	58	52	58	61	62	60	58	60	57	59	65	64	63	65	65	66	55	56	63	58.5
Burlington	Maximum	89	90	88	82	84	86	87	78	83	78	75	85	83	88	89	81	78	84	81	83	86	81	83	86	85	86	85	83	91	94	96	84.8
	Minimum	56	58	57	53	56	60	53	65	61	62	60	60	57	61	61	64	65	61	58	58	61	67	62	64	65	68	71	57	62	67	75	61.5
Martinsburg§	Maximum	92	97	83	83	88	91	89	72	81	80	76	88	87	90	81	88	86	86	86	86	90	88	89	93	91	90	89	87	92	98	101	87.7
	Minimum	64	64	66	61	60	62	67	67	66	62	62	63	63	64	64	67	68	68	62	62	65	69	68	68	70	68	70	65	65	68	74	65.5
Moorfield	Maximum	101	100	94	86	....	92	88	84	86	85	78	92	....	97	85	88	80	89	89	88	92	87	91	92	88	98	90	90	101	104	104	91.0
	Minimum	54	60	68	52	....	57	60	64	66	60	60	66	....	58	66	64	65	63	63	59	62	68	64	64	64	69	69	56	57	65	66	62.4
Piedmont	Maximum	91	88	83	80	84	90	84	76	84	79	76	83	81	85	79	81	77	82	82	83	86	84	85	87	83	82	83	85	91	93	94	83.9
	Minimum	54	59	61	53	52	58	60	61	61	60	60	60	56	60	64	64	64	61	59	52	61	65	64	64	66	68	70	55	59	66	72	60.9
Romney	Maximum	95	96	86	86	90	90	88	80	81	81	89	87	86	90	83	87	81	89	86	85	91	83	82	90	90	93	88	89	95	98	100	88.2
	Minimum	54	60	67	55	53	60	62	64	61	60	60	55	62	65	67	64	65	62	60	61	63	67	63	65	66	68	66	57	58	68	70	62.2
Upper Tract	Maximum	93	92	89	86	83	89	85	83	84	81	78	85	85	89	86	84	80	83	82	83	87	83	85	87	82	88	84	85	93	94	94	85.9
	Minimum	51	50	65	49	49	54	55	61	62	56	56	59	54	60	64	61	62	61	58	58	59	66	63	62	63	65	68	68	55	55	69	59.3
Northern Division.																																	
Bens Run	Maximum	88	81	89	81	85	90	78	81	82	74	75	79	80	80	79	78	80	79	85	88	91	91	93	92	95	86	83	86	92	92	93	84.7
	Minimum	61	68	57	58	56	58	65	65	59	60	62	60	57	60	64	68	66	61	59	64	63	61	68	68	69	69	68	59	61	70	70	63.0
Buckhannon	Maximum	84	82	80	78	81	86	82	81	79	77	72	79	79	82	75	80	76	75	80	83	84	80	84	86	84	81	80	80	85	88	89	81.0
	Minimum	54	55	56	53	51	56	60	64	58	60	59	60	58	60	65	64	68	61	58	60	59	66	64	68	66	65	68	59	56	64	67	60.7
Creston	Maximum	88	83	84	81	84	91	86	80	82	75	76	79	79	76	77	76	77	74	79	84	92	90	91	92	94	88	84	85	92	95	96	84.2
	Minimum	57	64	58	57	54	58	65	65	60	63	66	61	56	61	66	65	66	60	57	63	60	67	66	70	70	69	68	60	67	68	70	63.1
Elkins	Maximum	90	85	79	78	82	88	81	82	80	75	71	80	80	84	76	78	78	76	81	84	85	81	86	87	84	83	78	84	87	89	90	82.0
	Minimum	53	59	54	50	49	53	61	62	58	57	58	59	58	58	62	62	62	58	55	57	59	64	63	61	64	63	67	56	52	60	67	58.7
Fairmont§	Maximum	90	84	86	86	89	96	87	86	85	80	75	82	81	82	80	82	82	78	87	88	90	88	94	94	93	85	85	90	92	94	96	86.7
	Minimum	58	65	58	59	55	58	63	65	59	59	61	62	56	61	65	65	65	61	58	62	61	67	64	65	69	69	69	58	59	69	70	62.4
Glenville	Maximum	94	96	86	88	90	97	98	86	87	85	80	83	85	84	82	84	83	86	89	91	92	93	94	95	95	90	89	90	95	96	98	89.7
	Minimum	59	61	62	55	55	58	60	64	60	60	61	60	57	60	66	65	64	60	60	62	62	67	68	67	67	69	68	60	60	69	69	62.4
Grafton	Maximum	84	84	79	78	78	82	82	78	78	65	70	76	76	74	73	73	78	78	86	84	77	85	79	78	82	82	78	81	88	95	94	79.8
	Minimum	57	62	60	56	53	57	61	65	60	60	61	61	58	62	66	54	65	62	61	60	61	66	62	64	68	68	68	59	57	67	69	61.6
Lost Creek	Maximum	82	84	81	80	84	88	92	82	83	77	73	78	80	83	76	78	78	80	83	89	87	85	89	91	88	83	84	88	90	91	93	83.9
	Minimum	56	63	58	55	49	54	56	63	55	59	59	60	55	60	64	63	64	56	58	59	58	56	64	62	66	66	67	68	65	66	68	60.4
Mannington	Maximum	86	80	81	79	82	88	83	82	82	76	71	76	79	81	78	78	75	77	81	84	85	81	86	88	85	82	82	83	89	90	90	81.9
	Minimum	55	64	55	54	51	55	61	63	57	58	59	60	54	59	65	64	65	60	57	59	59	65	63	62	67	67	67	57	58	67	67	60.5
Morgantown	Maximum	87	88	92	84	85	92	88	87	86	81	75	82	84	81	80	81	81	78	91	91	88	86	88	93	87	86	83	85	91	92	95	86.1
	Minimum	61	69	55	54	52	58	64	66	59	57	57	60	56	59	66	65	65	64	58	60	61	61	63	66	68	69	67	58	60	71	72	62.0
New Cumberland	Maximum	86	81	78	77	78	89	79	78	82	75	69	75	76	80	82	77	77	78	84	85	88	88	85	87	89	85	88	86	94	94	94	82.7
	Minimum	56	65	51	47	50	52	63	64	56	59	58	58	54	59	64	66	64	60	58	56	60	62	62	61	66	66	69	55	61	72	73	60.2
New Martinsville	Maximum	86	85	82	82	86	92	85	80	81	78	73	76	77	78	76	77	79	78	82	82	88	86	92	94	92	84	87	90	92	94	96	84.2
	Minimum	58	68	57	57	56	52	65	64	60	60	60	56	61	66	67	66	64	60	62	63	68	67	66	69	68	72	60	60	72	72	73	63.1
Parkersburg	Maximum	89	82	82	78	82	90	81	80	84	72	78	77	81	80	79	79	80	80	85	87	85	85	88	90	91	87	86	86	94	92	94	84.0
	Minimum	63	68	57	60	58	61	63	66	59	63	63	57	61	68	67	67	62	58	65	66	71	68	68	70	70	70	62	64	74	73	64.7
Parsons	Maximum	86	83	78	77	83	89	84	82	79	76	68	80	79	81	75	80	77	77	81	84	84	87	89	83	82	75	85	86	85	88	90	81.7
	Minimum	53	55	58	49	50	50	55	60	61	57	57	57	59	55	62	61	62	59	57	57	60	59	60	60	62	66	54	53	52	64	66	57.7
Philippi	Maximum	88	87	81	85	83	90	90	90	87	80	72	89	89	84	80	82	86	89	83	86	87	83	89	89	90	81	84	89	91	92	86.0
	Minimum	51	62	57	51	47	54	58	60	54	54	52	56	45	46	51	54	57	59	46	47	47	53	48	60	61	54	54	58	57	64	58	54.1
Pickens	Maximum	84	82	75	72	76	82	78	78	74	73	67	75	75	78	67	71	72	73	75	76	77	72	72	77	75	75	75	80	82	....	85	75.8
	Minimum	52	60	55	50	50	57	63	63	56	55	57	55	61	61	60	59	57	56	55	56	61	58	59	63	63	63	60	55	....	55	57.7
Terra Alta	Maximum	81	78	76	77	78	83	78	77	76	72	66	72	73	77	70	73	72	70	76	78	81	77	80	82	72	76	71	78	81	84	85	76.5
	Minimum	54	65	55	56	55	60	55	61	56	54	54	56	55	57	60	60	61	60	56	60	53	51	60	64	62	65	64	62	56	66	70	58.8
Wellsburg	Maximum	83	78	74	74	77	83	78	75	79	70	68	72	75	78	77	76	77	75	79	81	84	82	85	86	88	82	84	82	87	88	89	79.5
	Minimum	60	65	54	51	56	56	65	63	56	59	57	59	57	59	63	65	64	60	59	62	63	64	65	66	69	69	69	67	65	74	74	62.4
Weston	Maximum	88	87	87	84	83	90	88	82	81	78	79	80	80	83	78	81	79	78	83	84	86	85	86	89	88	85	83	86	88	94	93	84.4
	Minimum	58	64	52	54	56	64	61	65	59	61	59	58	58	61	66	64	65	64	59	61	61	62	61	65	67	67	68	67	69	67	69	62.3
Wheeling§	Maximum	92	85	85	86	87	94	77	81	90	79	75	79	83	85	87	82	85	83	90	89	93	91	93	95	93	90	91	91	97	100	102	88.1
	Minimum	58	66	55	57	54	55	65	63	59	59	60	59	55	60	63	66	65	62	58	59	62	64	67	66	64	69	69	59	60	66	72	61.8
Southern Division.																																	
Beckley	Maximum	85	85	86	81	85	85	84	82	83	80	82	80	81	84	74	80	80	83	80	82	83	82	83	84	85	86	86	83	86	92	91	83.3
	Minimum	60	50	51	50	51	50	63	55	50	49	55	58	56	61	61	60	59	57	59	58	59	66	60	60	61	59	58	59	61	65	65	57.6
Bluefield	Maximum	83	85	82	79	82	85	80	81	82	80	75	77	78	84	75	75	75	75	75	76	75	76	78	80	81	80	79	84	....	87	88	79.7
	Minimum	55	64	61	53	52	59	65	63	58	52	56	58	59	64	64	61	61	61	59	59	60	64	65	64	65	63	66	68	....	61	66	60.9
Charleston	Maximum	92	93	90	89	90	95	93	90	89	87	83	87	87	87	82	81	84	85	89	89	87	88	90	94	92	92	90	92	97	96	98	89.6
	Minimum	60	61	65	59	57	61	69	60	63	61	58	60	61	64	60	61	60	63	62	64	64	63	69	67	68	71	71	68	67	68	71	63.7
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum	90	91	90	88	89	90	91	89	86	89	86	84	83	85	80	81	79	78	81	83	82	80	83	84	86	88	89	89	92	93	94	86.2
	Minimum	60	70	64	62	63	62	64	60	61	63	60	62	64	63	60	62	60	61	62	64	62	61	62	63	64	64	63	62	64	63	70	62.7
Hinton §	Maximum	91	93	80	79	87	90	84	87	81	87	81	80	84	87	82	82	78	82	82	82	83	81	84	88	88	89	86	88	92	95	93	85.4
	Minimum	55	57	64	54	55	57	63	64	63	60	58	59	60	59	63	61	63	62	61	62	61	63	67	63	65	67	68	67	61	63	67	61.7
Holcomb §	Maximum	90	87	80	81	83	89	87	84	81	79	78	81	80	82	71	80	78	83	82	79	84	81	84	88	83	82	82	86	88	90	91	83.0
	Minimum	49	54	59	47	47	51	60	61	60	55	57	53	53	54	59	58	56	56	54	55	55	58	60	57	60	60	64	66	56	52	62	56.4
Huntington §	Maximum	93	84	86	86	85	92	88	86	86	76	79	86	84	82	78	73	85	80	84	87	84	84	89	84	90	90	89	90	96	96	98	86.1
	Minimum	63	65	60	62	61	62	66	69	64	67	63	62	59	59	67	66	65	66	60	62	67	70	70	70	72	73	72	68	65	70	71	65.7
Lewisburg	Maximum	86	89	78	76	82	86	83	82	83	78	82	82	79	84	75	81	76	78	80	78	81	84	82	85	82	85	82	84	88	89	90	82.3
	Minimum	49	56	62	50	49	56	59	56	62	54	52	56	53	57	63	58	61	60	57	57	60	64	64	64	63	66	66	64	54	59	64	58.5
Madison §	Maximum																																
	Minimum																																
Marlinton	Maximum	84	82	74	76	80	78	76	76	72	74	70	76	74	78	70	74	68	72	74	72	76	74	76	78	76	78	78	80	84	82	86	76.4
	Minimum	52	56	54	48	44	50	56	58	54	52	54	54	54	60	58	58	62	58	56	51	58	60	62	60	62	62	60	56	50	58	62	56.2
Point Pleasant	Maximum	91	85	85	83	87	92	89	82	86	78	81	82	83	82	82	81	83	81	87	88	87	86	88	91	92	89	89	89	95	95	96	86.6
	Minimum	60	66	54	57	53	57	65	63	58	62	57	59	53	58	64	64	63	59	56	62	62	66	65	65	66	70	69	58	60	69	68	61.5
Powellton	Maximum																																
	Minimum																																
Robertsburg§	Maximum	90	81	85	85	87	94	89	82	85	79	79	81	82	81	82	80	83	81	89	88	82	89	92	89	92	87	86	90	94	92	94	86.1
	Minimum	60	65	59	59	57	59	59	66	60	63	59	61	59	62	62	63	65	62	59	63	64	68	68	72	68	70	70	64	60	62	69	63.1
Ryan	Maximum	87	86	87	86	89	92	90	81	73	76	82	81	82	80	78	80	80	82	85	85	81	90	89	88	88	88	88	89	92	95	95	85.3
	Minimum	55	61	61	59	52	55	55	61	54	56	57	55	55	55	65	63	63	58	56	66	59	62	62	63	64	63	66	68	56	64	67	59.7
Spencer§	Maximum																																
	Minimum																																
Union §	Maximum	89	88	89	87	87	80	83	85	85	80	82	83	86	84	83	78	76	79	80	79	82	83	84	86	82	83	87	89	93	91	....	84.1
	Minimum	50	50	51	52	50	57	63	55	59	53	56	54	57	60	59	60	58	59	58	57	56	63	66	63	64	62	62	64	56	60	61	57.9
White Sulphur Spgs.	Maximum	89	90	83	81	80	78	81	85	82	78	80	79	83	86	79	80	73	77	80	80	81	80	84	85	80	85	86	89	90	92	94	82.9
	Minimum	57	48	53	49	52	48	52	63	55	50	54	55	53	56	58	60	62	60	59	58	59	61	64	65	63	63	66	70	63	62	63	58.4
Williamson §	Maximum	92	89	84	84	85	80	89	86	81	81	79	84	83	86	76	76	70	79	84	84	78	79	86	87	88	88	84	89	94	94	94	84.3
	Minimum	62	65	67	60	61	62	66	68	66	63	66	60	64	65	66	65	65	64	64	65	67	69	69	70	71	70	72	73	72	69	73	66.4

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

.06
WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

AUGUST, 1917

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
SEPTEMBER 25, 1917

Departure of the Mean Temperature from the Normal, August, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (—).
Lines show amount of excess or deficiency.

G

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

OL. XXV. PARKERSBURG, W. VA., AUGUST, 1917. No. 8.

GENERAL SUMMARY.

While the temperature and rainfall for August averaged ractically normal, the month was considered favorably cool nd generally dry. The periods of high temperature were short nd the warmest weather occurred on the 1st. At several sta- ons the August low temperature record was equalled or broken the 26th, when light frosts were observed at Davis, Tucker ounty, and Pickens, Randolph County. The greater portion the rainfall was received during thunderstorms. Over most the southern and central counties the conditions were droughty om the 15th to the 30th, when good rains were general. xcessive rains on the 13-14th caused much damage to crops in hio, Marshall, and Wetzel Counties. Robert Beall and Harry iller were killed by lightning in Gilmer County during a severe orm on the 23d. The conditions were favorable for harvesting nd threshing. At the close of the month corn was about two eeks late but a good yield was in sight. Buckwheat was also good condition.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was .03 inches. The highest and lowest readings observed were follows: Parkersburg, 30.26 inches on the 27th, and 29.65 ches on the 23d. Elkins, 30.34 inches on the 27th, and .68 inches on the 24th.

TEMPERATURE.

The monthly mean for the State, 43 stations reporting, was 1.6°. The mean departure from the normal for 37 stations aving ten or more years of record was —0.1°. The month pened warm, the highest temperatures occurring on the 1st, ut much cooler weather set in on the 3d. Moderately warm eather also prevailed from the 5th to the 8th, 14th to the 16th, 0th to the 24th, and on the 29th. The temperatures were con- derably below the normal from the 10th to the 12th, 17th to he 29th, and 25th to the 28th, with the lowest readings on the 3th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and lkins at 8 a. m. and 8 p. m., with the normals, were follows: Parkersburg, 8 a. m., 83 per cent; 8 p. m., 72 er cent. The August averages for the same hours for the ast 29 years are 82 and 69 per cent, respectively. Elkins, 8 . m., 89 per cent; 8 p. m., 75 per cent. The August aver- ges for Elkins for the same hours for the past 16 years are 91 nd 81 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 62 stations reporting, as 3.53 inches. The departure from the normal for 42 sta- ions having ten or more years of record was +0.02 inch. he rainfall was greatest over the northern counties, especially larshall, Ohio, and Brooke Counties, and lightest over the outheastern, central, and west-central counties. The amounts ere especially light in most of the mountain sections. Showers ccurred quite generally on the 2d, 6-9th, 13-15th, 22-24th, and 8-30th, the amounts received being moderate to heavy in many ocalities on the 8th, 14th, and 23d.

WIND.

The average wind velocity at Parkersburg was 3.8 miles per hour, or 0.4 mile below the August average for 27 years. The average at Elkins was 2.6 miles per hour, or 0.1 mile below the August average for 17 years. The highest velocity at Parkersburg was 23 miles per hour from the northwest on the 29th, and at Elkins 14 miles per hour from the west on the 25th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 59 per cent of the possible amount, or 4 per cent above the August average for 20 years. The average at Elkins was 65 per cent, or 14 per cent above the August average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 3d, 4th, 6th, 10th, 11th, 12th, 16th, 17th, 18th, 20th, 21st, 25th, 26th, 27th, and 31st; Bayard, 14th; Brandywine, 16th; Creston, 10th, 16th, and 26th; Dam No. 22, 10th, 17th, and 18th; Dam No. 26, 16th, 19th, and 20th; Elkins, 1st, 2d, 4th, 5th, 6th, 11th, 12th, 16th, 17th, 18th, 19th, 21st, 26th, and 27th; Grafton, 3d, 10th, and 25th; Hinton, 17th; Holcomb, 3d; Kayford, 31st; Lewisburg, 26th; Mannington, 1st, 3d, 10th, 12th, 17th, 18th, 19th, 21st, 26th, 27th, 29th, and 31st; Marlinton, 16th, 17th, 18th, 19th, 20th, 21st, 23d, 24th, 25th, 26th, 27th, 28th, 29th, 30th, and 31st; New Cumberland, 3d, 10th, 12th, 17th, 18th, 19th, 20th, and 26th: Robertsburg, 10th, 16th, 17th, and 21st; Romney, 6th, 7th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22d, and 29th; Rowlesburg, 2d, 3d, 4th, 5th, 11th, 12th, 13th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22d, 27th, and 29th; Smithfield, 3d, 16th, 17th, 18th, 19th, 26th, 27th, and 31st; St. Marys, 17th and 18th; Wheeling, 12th, 15th, 18th, 19th, and 27th

Frost, light: Davis, 25th and 26th; Pickens, 26th.

Hail: Creston, 22d; Romney, 6th and 8th; Smithfield, 13th.

Halo, solar: Wellsburg, 20th.

Haze, light: Bayard, 18th.

Thunderstorms (dates and number of stations reporting): 1st, 1; 2d, 8; 6th, 8; 7th, 8; 8th, 8; 9th, 1; 10th, 1; 11th, 3; 12th, 1; 13th, 8; 14th, 8; 15th, 5; 21st, 4; 22d, 10; 23d, 8; 24th, 5; 28th, 3; 29th, 7; 30th, 1; 31st, 6.

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	69.8	..	....	5.48	....	....	....	..	..	..
1892	72.1	96	41	2.55	....	....	....	..	..	..
1893	70.8	98	41	3.38	....	....	....	..	..	..
1894	71.5	103	38	2.07	5.15	0.27	....	14	12	5
1895	73.3	104	40	3.01	7.69	1.15	....	15	11	5
1896	72.6	97	40	2.82	5.69	0.88	....	15	12	4
1897	70.9	100	42	2.91	5.93	0.77	....	13	14	4
1898	73.7	96	44	7.51	11.57	4.40	....	12	12	7
1899	73.5	100	34	2.64	6.37	0.34	....	15	11	5
1900	76.0	100	45	3.15	7.20	1.03	....	17	10	4
1901	73.6	98	43	5.14	13.70	1.64	....	10	13	8
1902	70.4	98	35	2.40	6.05	0.97	....	15	13	3
1903	71.4	105	38	2.64	5.85	0.99	....	12	13	6
1904	70.7	95	32	2.88	6.71	0.67	....	15	10	6
1905	71.3	96	40	4.25	8.32	1.32	....	14	11	6
1906	75.4	98	47	5.15	10.72	2.18	.. .	10	13	8
1907	69.4	93	41	4.64	10.12	1.55	....	13	10	8
1908	70.9	101	37	2.82	5.63	0.84	....	15	10	6
1909	70.8	99	37	3.03	5.79	0.81	....	16	10	5
1910	70.8	98	39	2.03	5.58	0.70	....	17	10	4
1911	73.5	105	40	6.71	12.14	2.38	....	13	10	8
1912	69.3	95	35	3.64	11.70	0.25	....	10	13	8
1913	72.7	102	37	3.18	8.20	0.79	....	19	7	5
1914	71.8	100	40	4.86	9.29	1.38	....	15	9	7
1915	69.4	*99	36	4.84	8.36	2.46	....	10	11	10
1916	72.9	104	40	4.76	15.35	1.46	....	14	9	8
1917	71.6	102	39	3.53	8.80	0.94	....	17	8	6
Means and extremes ..	71.8	105	32	3.78	15.35	0.25	....	14	11	6

Climatological Data for August, 1917.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	68.2	+2.4	87	1	43	19†	40	3.85	−0.71	0.78	0	11	12	7	12	w.	G. C. Dixon.
Brandywine	Pendleton		0	70.6		97	1	39	26	43	2.16		0.73	0	7	27	2	2	s.	Elmer Keister.
Burlington	Mineral	875	22	71.9	+0.7	99	1	51	18	39	3.65	+0.12	1.55	0	7	11	19	1	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27								4.54	+0.71	1.60	0	11				e.	S. W. Lightner.
Martinsburg	Berkeley	435	24	73.8	+0.7	98	2	49	26	35	5.58	−0.22	3.07	0	10	18	9	4	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20			102[p]	1†													M. S. Henkel.
Piedmont	Mineral	919	0	70.7		96	1	45	26	37	5.53		1.32	0	12					C. A. Suter, Jr.
Romney	Hampshire	824	19	73.0	+0.2	102	1	45	26	48	4.90	+1.02	1.25	0	6					Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	71.3	+0.3	95	1	42	26†	40	2.30	−1.84	0.75	0	6	23	4	4	w.	J. M. Mallow.
Averages and	extremes			71.5	+0.9	102	1†	39	26	48	4.06	−0.15	3.07	0	9	18	8	5	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	74.0	+0.3	99	5	49	26	36	4.71	+0.94	2.00	0	8	21	7	3		J. D. Riggs.
Brandonville	Preston	1,809	6								5.06		2.62	0	6					W. T. Miller.
Buckhannon	Upshur	1,411	20	70.1	0	90	1	42	26	34	4.37	+0.41	1.66	0	6	24	6	1		H. A. Darnall.
Central Station	Doddridge	950	19																	D. H. Doak.
Cortland	Tucker	3,300	1								2.35		0.70	0	6					Samuel Harmon
Creston	Wirt	701	15	73.4	+0.2	96	1	45	26	40	5.70	+2.56	2.84	0	9	21	4	6	sw.	J. M. Reed.
Davis	Tucker	3,093	8								1.58		0.66	0	7	26	2	3	sw.	Ross C. Male.
Elizabeth	Wirt	646	5								4.06		1.60	0	4					E. D. Ball.
Elkins	Randolph	1,940	16	69.4	+1.0	91	1	41	26	40	3.26	−0.39	1.23	0	11	9	14	8	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	74.2	+1.4	97	1†	45	26	39	1.46	−2.01	0.52	0	8	22	6	3	w.	F. P. Hall.
Glenville	Gilmer	738	23	75.4	+1.9	100	21	47	26	50	3.19	−0.73	2.15	0	6	12	14	5	w.	Howard R. Brannon.
Grafton[b]	Taylor	1,000	24	69.6	−1.9	93	1†	44	26	42	1.58	−2.42	1.19	0		19	10	0	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	71.2	+0.6	95	1	39	26	44	2.77	−1.34	0.87	0	8	20	7	4	w.	Allen Smith.
Mannington	Marion	974	14	70.2	−0.7	91	1	42	26	35	6.09	+2.63	2.47	0	11	16	8	7	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	73.1	+0.9	95	1	45	26	40	3.60	−0.40	0.78	0	9	16	0	15	sw.	R. W. Muldoon.
Moundsville	Marshall	642	14	71.4	−1.3	95	1	45	26	37	8.80	+5.92	4.00	0	7	17	8	6	e.	M. Z. White.
New Cumberland	Hancock	987	19	70.4	−0.4	94	1	44	26	39	4.91	+1.67	1.75	0	12	9	18	4	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	74.2	+0.1	98	1	48	26	38	5.86	+2.56	2.00	0	12	21	4	6	s.	Wm. Ankrom.
Parkersburg	Wood	638	30	73.6	+0.3	94	1	49	26	45	2.18	−1.35	0.60	0	11	15	7	9	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	68.8	−0.3	91	1	42	26	38	5.22	+1.44	1.70	0	6	15	10	6		J. W. Swisher.
Philippi††	Barbour	1,149	20			94	1				2.90	−1.21	1.10	0	6	20	11	0		Okey J. Robinson.
Pickens	Randolph	2,697	14	67.0	+0.1	86	19†	41	26	36	2.10	−2.87	0.71	0	8	17	12	2	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30								2.80	−0.96	1.30	0	7					J. F. Pierce.
Saint Marys	Pleasants	577	8								4.15		1.38	0	9				sw.	Wm. Hughes.
Smithfield	Wetzel	835	11	70.6	−0.6	94	1	45	26	36	6.01	+1.77	1.90	0	9	25	4	2	se.	G. M. Whisler.
Terra Alta	Preston	2,612	16	67.1	−0.9	87	21	43	26	35	3.06	−1.80	1.40	0	7	13	18	0	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	70.0	0	89	1	47	26	30	6.21	+2.65	2.05	0	10	12	16	3	w.	C. P. Waugh.
Weston	Lewis	1,026	21	72.8	−0.2	93	1	45	26	39	3.80	−0.10	1.10	0	8	9	21	1		Weston State Hospital.
Wheeling	Ohio	645	30	74.0		101	1	45	26	42	7.04	+3.58	2.27	0	10	15	8	8	sw.	Miss M. B. Forsyth.
Averages and	extremes			71.5	0	101	1	39	26	50	4.15	+0.53	4.00	0	8	17	9	5	w.	
Southern Division.																				
Bancroft	Putnam	574	12	72.7	−1.1	94	1	48	26	37	2.38	−2.22	1.04	0	7	25	0	6	nc.	R. E. Dent.
Beckley††	Raleigh	2,440	16	69.7	−1.5	88	1†	42	25	38	2.34	−0.75	0.67	0	5	20	10	1	w.	John A. Ewart.
Bluefield††	Mercer	2,558	21	69.8[a]	−1.5	88[a]	1	45[a]	27	34[a]	2.84	−1.51	0.65	0	10	21[a]	4[a]	5[a]		Norfolk & Western Ry
Camden-on-Gauley	Webster	2,062	1								1.32		0.80	0	4	25	0	6	s.	C. A. Droddy.
Charleston	Kanawha	597	13	76.4	+0.9	98	1	52	26†	38	4.26	−0.06	2.40	0	7	13	1	17	w.	C. V. Lewis.
Clay	Clay	706	0								0.94		0.32	0	4					Prof. E. H. Knabenshue
Cuba	Jackson	650	14	72.6	+0.6	98	1	43	26	40	1.93	−1.10	0.62	0	9	16	15	0	w.	Frank Allen.
Dam 19 O. R.	Wood	557	0								1.54		0.81	0	10					Lockmaster.
Dam 20 O. R.	Wood	551	0								2.31		0.51	0	8					Lockmaster.
Dam 22 O. R.	Jackson	538	1								1.49		0.71	0	10					U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0								1.75		0.68	0	6					U. S. Engineer Office.
Dunlow	Wayne	703	8																	James W. Damron.
Elkhorn	McDowell	1,933	23																	J. J. Lincoln.
Evans	Jackson	606	0	73.1		92	1	55	18	26	3.60		0.88	0	10	15	6	10		B. F. Sayre.
Gary	McDowell	1,426	0								6.17		1.58	0	11					U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	20																	W. H. Gwinn.
Hinton	..do	1,450	19	72.8	−1.2	95	2	48	27	39	1.96	−1.80	0.54	0	8	14	4	13	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	24	69.0		92	1	42	27	44	1.84		0.52	0	6	20	8	3		R. C. Ferguson.
Huntington	Cabell	538	0	74.7	+0.1	99	1	50	26	34	5.57	+1.80	1.99	0	8	18	2	11		L. H. Hutchinson.
Kayford	Kanawha	1,335	0								3.42		1.47	0	8					CabinCreek Con.Coal Co
Lewisburg	Greenbrier	2,200	16	69.2	−0.8	92	1	39	26	44	2.95	−0.55	1.44	0	6	17	12	2	nw.	Geo. T. Argabate.
Logan	Logan	687	13																	Agent C. & O. Ry.
Madison	Boone	704	10																	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	64.2	−3.5	84	1	40	26	32	2.07	−2.34	0.70	0	9	8	18	5	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23																	Miss Donna Tully.
Point Pleasant	Mason	553	23	73.2	−1.5	97	1	44	26	42	1.82	−1.44	0.55	0	8	19	2	10	sw.	W. D. Holmes.
Powellton	Fayette	933	20																	S. C. Lampert.
Rainelle	Kanawha	2,425	0																	A. L. Guthrie.
Raleigh	Raleigh	2,130	0								2.07		0.58	0	10					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	0								3.00		0.95	0	6					Wm. B. Hill.
Robertsburg	Putnam	574	16	74.0	−0.4	96	21	47	26	39	2.53	−0.84	0.67	0	9	18	2	11		E. C. Brace, Jr.
Ryan	Roane	709	13	70.8	−1.2	95	1	39	26	42	2.88	−1.06	0.42	0	12	18	9	4		Wm. E. Ryan.
Sissonville††	Kanawha	625	0								1.37		0.75	0	3	20	0	11		J. N. Johnson.
Spencer	Roane	784	12								5.54	+2.13	2.60	0	4	4[a]	11[a]	15[a]		A. M. McKown.
Sutton	Braxton	839	10								2.25	−1.51	1.25	0	3					C. B. Eakle.
Union	Monroe	2,250	12	72.2[a]	+1.7	93[a]	1	40	26	44[a]	3.10	−0.75	0.90	0	6					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	69.5		94	1	40	27	42	2.05		0.50	0	7	26	5	0		J. M. Ayres.
Williamson	Mingo	660	16	74.5	−0.6	96	1	52	26	32	3.90	−0.08	1.40	0	10	18	10	3	w.	J. F. Keyser.
Averages and	extremes			71.9	−0.6	99	1	39	26	44	2.76	−0.70	2.60	0	8	17	7	7	w.	
State averages and	extremes			71.6	−0.1	102	1†	39	26	50	3.53	+0.02	4.00	0	8	17	8	6	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[r] Approximated by the observer.

Daily Precipitation for August, 1917.

Stations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac		.20				.76	.02	.72	.21					.08	T.								.36	.34					.66	.09	.41	3.85
Brandywine	do			.73				T.		.52					.17	.40								T	.12					.09	.13	T.	2.16
Burlington	do						.10	.63	1.55			.27		T.	.57									.33							T.	.20	3.65
Harpers Ferry |||	do		.22				.05		1.60	.05			T.		.32	1.10	.02						.05	.03	.50					.60		4.54
Martinsburg	do		.05				2.95	.12	.80			.45			.37	.18	.12							.38					T.	.16			5.58
Moorefield	do			.01		.20								.90			.33															†††
Piedmont	do		T.					1.10	1.32				.20	.45			.11	.80						.20	.09				.06	.92	.08	.20	5.53
Romney	do		T.				.35	.30	1.25					.65	1.10									1.25					T.	T.		4.90
Upper Tract	do			.70				.10				.40			.75	.25								.10	T.						T.	T.	2.30
Northern Division.																																	
Bens Run	Ohio								.09						1.22								.14	2.00					.03	.65	.35	.23	4.71
Brandonville |||	Monongahela			1.14						.40					.34	.30								2.62						.26		5.06
Buckhannon	do						.70		.54						T.								T.	T.	1.66				T.	.25	.22	1.00	4.37
Central Station	Middle Is. Creek																																
Cortland |||	Monongahela		.70							.54					.25							.19		.51						.16		2.35
Creston ||||	Little Kanawha		T.	.12				.10	1.18					T.	.10								2.84	.47				.13	.63	.13	5.70
Davis				Monongahela		.28					.08		.66			.03		T.									.20				T.	.21	.12	1.58
Elizabeth |||	Little Kanawha														.63	1.45							1.60	.38								4.06
Elkins***	Monongahela		.36				.33		1.10	.13					.02	.04								.19	.06				.23	.19	.61	3.26
Fairmont				do			T.				T.	.12	T		T.		.07	.07	.12							.16	.16				T.	.52	.24	1.46
Glenville				Little Kanawha							T.	.12					.11								2.15	.51					.22	.08	3.19
Grafton	Monongahela		T.					*	*																.08				*	.31	1.19	1.58
Lost Creek	do		T.					.51	.50						T.								.17	.12	.13				.31	.56	.47	2.77
Mannington	do		.05					.02	.35						.18	.06							.32	2.15	.31				.13	.33	2.19	6.09
Morgantown	do		.78				.32		.13		T.	T.			.55	.46							.12	T.	.57					.31	.36	3.60
Moundsville	Ohio							1.30		.70					4.00									1.50	.35					.65	.50	8.80
New Cumberland	do						.23	.44	.26	T.				.02	.49							.69	.02	1.75	.46	T			.02	.20	.33		4.91
New Martinsville	do						.15		.20			.10			.80	.70							.30	2.00	.38				.10	.40	.58	.15	5.86
Parkersburg ***	Ohio		.09					T.	.19	T.		T.		.07	.02	.47							.02	.17	T.				.32	.27	.36	.20	2.18
Parsons	Monongahela		T.	.12				1.70	T.	.72					T.	T.	.68							T.						.79		1.21	5.22
Philippi	do								.80				.25			.40	.10							.25							1.10		2.90
Pickens	do		.03				.58		.71							.32								.05	.07					.02	.32	2.10
Rowlesburg |||	do							.08		1.30					.08	.45									.58					.15	.16	2.80
Saint Marys |||	Ohio		T.	T.				.05	.05	T.	T.	T.		.22	.75	T.	T.						1.38	.45	T.				.05	1.08	.12	4.15
Smithfield |||	Fishing Creek			.90					.12	.01				.70	.45								1.26	.67						.38	1.52	6.01
Terra Alta	Monongahela		.10													.50	.05							1.10	.30						.25	.76	3.06
Wellsburg	Ohio						.30		.91						2.05								.10	1.05	.33				.01	.40	1.05	.01	6.21
Weston	Monongahela							.38	.72														.65	.15	.55					.15	.35	.85	3.80
Wheeling ||||	Ohio							.42		.55	T.		.18		2.27	.87	.06						1.49	.30	T.		T.	T.		.70	.20	7.04
Southern Division.																																	
Bancroft |||	Great Kanawha							.05	.12	.33						.08								1.04	.08					.68		2.38
Beckley	do	.67							.16												.62				.46					.43			2.34
Bluefield	do		.18						.65		.38					.45	.02					.58	.05	.38	.03							.12	2.84
Camden-on-Gauley ||||	do								.20													.10	.22						.80		1.32
Charleston |||	do								.10						.12	.20							2.40						.30	1.04	.10	4.26
Clay |||	do			.14												T.							.32	.22						.26		0.94
Cuba	Sand Creek		.19					.03	.11	T.				T.	.10	T.							.03	.30					T.	.05	.62	.50	1.93
Dam 19 O. R. |||	Ohio		.03							.13					.05		.04							.13	.02	.01				.05	.81	.27	1.54
Dam 20 O. R. |||	do			.25	T.					.21					.05		.28							.21	T.					.37	.43	.51	2.31
Dam 22 O. R. |||	do		T.				.04	.02		.11					.03	.08								.17	.05				T.	.16	.71	.12	1.49
Dam 26 O. R. |||	do							.45	.14	.08														.30	.10					T.	.68	T.	1.75
Dunlow	Big Sandy																																
Elkhorn	do																																
Evans	Ohio		.88					.49	.28	T.					.06								T.	.50	.02				.41	.08	.42	.46	3.60
Gary |||	Big Sandy		.86	.50			.53	.16	.12	.55					.12						1.58	.08	.84								.83		6.17
Green Sulphur Spgs.	Great Kanawha																																
Hinton |||	do			.48						.54	.32					.02							T.	.04	.18					.14	.24	1.96
Holcomb	do		.24						.40							.20						T.			.16					.52	.32	1.84
Huntington |||	Ohio		.02					.64	.16	1.83				.26	.14								1.00							1.52	T.	5.57
Kaytord ||||	Great Kanawha			.08				1.47		.68								T.			T.	.42	.04	.02			T.			.51	.20	3.42
Lewisburg	do		1.44					T.	.77							.17					T.			.19	T.					.08	.30	2.95
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do		.10					.10	.70	.06	.06				T.	.30							T.	50	T.					.10	.15		2.07
Nuttallburg	do																																
Point Pleasant	Ohio		.08					.06		.15					.16									.55	T.				.30		.42	.10	1.82
Powellton																																	
Rainelle ||||	Great Kanawha																																
Raleigh ||||	do			.58				.06	.17	.14	.09										.27		.11	.19						.30	.16	2.07
Renick |||	do			.20			.15			.95											.80		.80							.10		3.00
Robertsburg ||||	do		.10					.40	.10	.18					.14	.17							.30						.17	.67		2.53
Ryan	do		.20					.17	.18					T.	.06	.12							.42	.35	.05				.30	.22	.39	.42	2.88
Sissonville ||||	do								.75					T.		.20						.42										1.37
Spencer |||	Little Kanawha										T.			.15		2.15							2.60			T.			.60			5.54
Sutton |||	Great Kanawha										1.25												.75								T.	.25	2.25
Union |||	do					.20			.30							.60					.90			.30								.80	3.10
White Sulphur Spgs.	do		.50					T.		.50						.25					T.			.20	.15					.15	.30	2.05
Williamson |||	Big Sandy			.50				.16	.16	1.40	.55				.02								.40	.04					T.	.65	.02	3.90

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for August, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	87	85	77	83	84	84	78	80	76	77	82	81	78	79	79	77	78	79	83	83	85	82	78	72	68	78	79	80	84	79	73	79.6
	Minimum	71	69	67	61	63	62	59	60	60	52	53	49	48	62	59	58	59	45	43	52	54	54	62	58	49	43	56	62	61	54	54	56.7
Brandywine	Maximum	97	94	88	87	90	92	84	85	88	78	81	83	85	84	81	85	84	84	86	90	91	87	89	85	80	80	84	88	89	79	78	85.7
	Minimum	63	64	61	60	64	53	62	60	61	54	50	49	55	56	62	60	55	48	47	54	55	57	62	61	48	39	41	47	55	54	60	55.4
Burlington	Maximum	99	95	87	85	87	94	88	87	85	77	77	82	83	77	80	83	84	82	84	91	89	91	91	83	82	84	83	86	84	77	71	84.8
	Minimum	67	73	57	54	53	59	64	65	67	58	55	53	58	61	65	62	62	51	53	52	57	60	62	61	52	54	56	55	60	61	61	59.0
Martinsburg§	Maximum	96	98	88	86	88	95	83	88	87	80	84	84	85	83	83	82	83	84	86	89	91	88	75	85	79	81	86	90	90	81	70	85.4
	Minimum	75	73	66	60	57	61	62	66	67	62	62	56	58	64	66	68	63	57	56	58	64	66	69	68	59	49	55	55	58	65	62	62.2
Moorfield	Maximum	102	102	96	99	96	....	....	....	....	....	....	87	92	81	88	90	88	85	95	98	97	....	....	....	....	....	....	....	....	....	....	92.5
	Minimum	66	79	60	55	54	....	....	....	....	....	....	55	52	64	66	64	60	50	57	57	59	....	....	....	....	....	....	....	....	....	....	59.9
Piedmont	Maximum	96	93	85	86	88	94	84	84	86	86	82	78	80	76	82	84	80	76	75	90	91	85	76	81	73	80	87	86	87	74	69	83.0
	Minimum	67	67	56	54	53	60	64	63	61	63	52	48	55	60	62	65	61	52	54	59	54	59	69	66	53	45	51	52	60	62	62	58.4
Romney	Maximum	102	99	89	85	90	98	90	90	89	80	81	89	88	84	85	90	86	86	89	95	93	86	83	85	80	85	90	86	91	87	86	88.3
	Minimum	68	64	57	56	52	50	65	65	63	57	55	53	54	63	73	62	60	50	52	58	60	61	65	63	49	45	50	50	60	52	54	57.6
Upper Tract	Maximum	95	94	89	87	87	91	89	86	86	86	86	87	85	83	83	85	83	83	89	86	92	90	87	84	80	80	81	84	85	87	85	86.3
	Minimum	64	65	61	60	54	61	60	63	63	63	57	52	50	57	58	59	56	47	50	49	57	57	58	60	61	42	42	44	55	60	60	56.3
Northern Division.																																	
Bens Run	Maximum	95	88	87	89	99	92	84	80	81	80	82	89	80	79	83	84	83	84	89	91	93	83	84	78	79	80	85	85	79	78	81	84.6
	Minimum	72	71	69	63	68	65	70	64	65	59	60	62	65	66	65	65	61	65	66	60	62	66	66	64	52	49	56	63	62	65	62	63.4
Buckhannon	Maximum	90	88	84	82	85	88	84	83	80	74	79	79	82	79	82	83	81	77	84	86	87	86	79	78	73	74	81	83	84	74	81	81.6
	Minimum	67	68	62	57	58	62	64	64	62	54	54	53	60	62	65	63	60	49	50	57	58	62	64	67	53	42	48	53	57	62	60	58.6
Creston	Maximum	96	87	88	89	93	92	87	86	82	80	81	85	85	86	85	85	86	89	89	92	93	93	84	82	75	85	89	85	80	84	80	86.2
	Minimum	70	70	60	60	63	66	67	66	65	57	55	57	60	64	66	67	60	53	56	58	60	61	65	60	50	45	50	65	60	60	60	60.5
Elkins	Maximum	91	89	81	83	87	89	85	85	81	74	79	84	84	81	84	81	81	79	86	87	90	88	81	77	69	77	85	83	85	74	80	82.6
	Minimum	65	66	59	55	54	59	62	65	62	55	51	51	56	65	63	59	54	49	47	55	55	57	61	58	47	41	45	50	55	60	60	56.2
Fairmont§	Maximum	97	90	89	89	94	94	92	86	84	80	86	92	91	86	89	87	85	86	92	94	97	94	84	81	71	83	89	89	89	73	88	87.8
	Minimum	70	70	58	60	58	65	66	67	66	56	60	57	61	66	64	66	60	53	53	59	60	62	66	67	54	45	51	55	60	63	62	60.6
Glenville	Maximum	99	99	90	91	95	97	96	92	86	86	88	93	94	94	90	90	90	90	92	99	100	96	84	89	87	85	89	91	90	80	89	91.3
	Minimum	69	70	61	60	63	63	64	66	65	55	55	55	57	65	64	66	59	52	55	49	56	59	66	67	56	47	50	56	59	58	59	59.5
Grafton	Maximum	93	93	80	75	85	85	....	....	81	72	77	77	76	77	76	76	77	77	82	86	85	81	74	74	72	84	92	89	90	73	84	80.8
	Minimum	68	69	57	58	59	63	....	....	64	57	57	55	60	65	65	64	60	51	50	58	58	60	65	56	54	44	50	50	58	60	60	58.4
Lost Creek	Maximum	95	89	81	87	89	92	90	85	82	80	81	88	88	87	89	86	85	85	90	92	92	89	82	79	71	83	87	88	89	74	83	85.7
	Minimum	67	68	55	56	57	59	60	65	60	53	54	53	57	65	63	63	57	46	47	50	55	58	64	64	51	39	45	55	56	60	59	56.8
Mannington	Maximum	91	87	82	82	88	88	84	80	80	76	79	83	83	80	83	83	80	78	85	88	89	87	77	77	74	77	83	83	83	70	82	82.0
	Minimum	68	67	55	56	56	62	61	63	67	55	60	55	58	64	62	64	58	49	50	55	57	58	64	66	52	42	50	57	59	63	59	58.5
Morgantown	Maximum	95	89	85	84	89	91	90	83	82	78	79	89	86	83	86	84	81	80	88	90	91	91	88	80	74	84	92	88	88	88	88	85.9
	Minimum	73	70	57	57	59	66	62	68	65	54	57	63	65	64	62	65	59	50	52	61	60	60	65	64	52	45	52	63	61	61	58	60.3
New Cumberland	Maximum	94	85	82	83	93	88	87	78	77	77	81	80	83	79	88	88	80	81	86	91	86	74	78	78	73	82	82	83	77	70	78	82.0
	Minimum	71	66	66	53	54	63	59	68	62	53	57	53	59	62	62	62	56	50	54	53	60	59	64	64	55	44	55	64	64	57	58	58.9
New Martinsville	Maximum	98	92	88	90	94	95	90	86	83	81	85	88	88	85	87	88	83	85	86	91	91	83	84	80	73	82	85	85	81	77	80	85.9
	Minimum	72	73	72	60	62	57	64	72	72	59	60	58	60	65	64	67	64	55	57	60	62	64	64	66	56	48	53	62	62	64	62	62.5
Parkersburg	Maximum	94	85	86	86	92	91	85	82	81	80	81	86	84	86	85	85	81	80	88	92	90	80	84	81	70	81	86	86	80	71	77	83.7
	Minimum	73	72	63	64	66	68	67	70	62	57	58	59	65	68	69	67	62	56	55	62	63	68	67	67	55	49	54	68	64	65	63	63.4
Parsons	Maximum	91	88	82	83	87	89	86	86	81	71	79	83	82	77	83	82	80	79	85	87	87	88	80	78	69	76	83	83	86	70	80	82.0
	Minimum	67	67	57	55	53	60	60	60	63	55	53	53	56	60	63	60	55	50	47	54	50	55	59	57	48	42	46	47	53	60	60	55.6
Philippi	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Pickens	Maximum	85	82	75	77	81	80	77	80	76	71	78	77	79	80	78	75	78	79	86	82	85	85	86	73	65	72	79	77	81	69	76	78.2
	Minimum	54	65	55	54	54	54	59	63	60	55	50	51	59	60	61	60	60	48	50	58	58	65	60	57	46	41	47	53	58	57	57	55.8
Terra Alta	Maximum	86	83	78	80	84	85	82	77	77	70	77	79	80	75	80	77	75	74	82	84	87	83	76	72	65	73	80	79	81	66	74	78.1
	Minimum	65	67	52	54	60	65	60	64	52	50	62	58	50	63	60	60	58	45	47	57	54	60	64	62	54	43	45	54	50	55	50	56.1
Wellsburg	Maximum	89	88	78	79	87	86	83	77	75	73	77	81	80	77	81	80	74	76	81	84	84	86	75	74	73	75	78	79	76	78	78	79.4
	Minimum	73	72	59	56	61	66	61	68	62	53	60	58	63	63	63	64	59	50	51	59	63	62	64	64	55	47	57	64	61	59	58	60.5
Weston	Maximum	93	89	85	87	90	91	84	85	81	82	82	87	86	82	86	84	85	82	90	91	92	90	81	79	75	80	85	86	87	76	82	85.0
	Minimum	69	69	59	58	60	64	66	66	66	61	55	56	60	68	66	65	59	56	51	58	58	62	65	67	55	45	50	59	60	63	61	60.5
Wheeling§	Maximum	101	93	91	90	98	94	90	90	86	81	82	90	89	84	91	90	87	88	95	95	94	80	84	85	70	85	90	90	84	72	85	87.9
	Minimum	71	72	56	58	59	66	63	66	65	55	57	59	59	62	65	65	59	53	53	59	61	61	60	65	56	45	54	56	63	60	60	60.1
Southern Division.																																	
Beckley	Maximum	88	86	87	84	85	88	85	86	86	84	79	80	82	84	83	82	83	84	82	86	82	84	84	85	80	81	82	80	81	83	83	83.5
	Minimum	66	62	54	66	67	64	60	61	53	54	48	58	60	60	52	52	47	48	57	58	57	65	55	54	42	45	51	50	52	52	62	55.9
Bluefield	Maximum	88	87	80	81	82	84	80	80	80	75	78	80	80	79	78	79	78	78	81	85	85	83	80	77	73	....	79	81	83	80	76	80.3
	Minimum	66	68	63	55	58	61	64	64	64	54	51	54	62	63	65	65	56	51	50	64	58	61	64	63	53	....	45	56	58	61	62	59.3
Charleston	Maximum	98	96	92	92	93	97	94	91	89	88	88	94	92	90	87	87	96	88	94	90	97	90	89	88	90	88	90	92	90	89	87	91.2
	Minimum	72	62	62	62	63	68	68	69	62	57	56	62	66	67	70	63	62	56	58	54	63	64	63	60	60	52	52	59	60	61	60	61.7
Elkhorn	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Green Sulphur Spgs.	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hinton §	Maximum	94	95	85	86	90	92	82	91	87	79	83	87	86	87	81	86	87	83	87	90	91	89	85	84	80	81	87	88	90	79	80	86.2
	Minimum	69	69	63	59	59	61	64	62	64	57	55	55	57	62	60	65	59	54	57	57	61	63	63	64	53	49	48	50	56	60	63	59.3
Holcomb §	Maximum	92	91	83	80	78	90	80	87	83	76	80	85	86	85	83	82	83	87	88	89	90	86	87	80	82	81	86	86	88	78	81	84.3
	Minimum	59	62	60	50	53	54	50	60	59	51	45	45	54	58	60	64	51	50	51	46	55	57	62	62	46	44	42	47	52	61	55	53.7
Huntington §	Maximum	99	90	91	90	94	92	84	82	83	81	85	87	83	89	85	87	82	85	90	93	91	78	84	87	75	82	71	87	84	75	78	85.3
	Minimum	73	75	64	63	66	68	69	70	64	60	60	60	62	67	70	69	64	58	56	61	65	68	68	67	59	50	54	59	65	66	66	64.1
Lewisburg	Maximum	92	89	81	82	84	85	89	84	84	79	80	83	83	82	78	82	82	82	85	86	88	86	84	81	74	79	85	87	88	78	78	83.2
	Minimum	62	64	60	56	53	55	61	60	62	52	51	51	59	56	62	62	53	48	49	49	57	58	63	63	47	39	41	49	54	59	58	55.3
Marlinton	Maximum	84	82	76	78	80	78	80	76	74	70	68	76	78	74	72	74	74	72	78	80	82	80	78	70	66	70	74	76	78	70	76	75.6
	Minimum	60	64	58	50	54	58	58	60	58	50	52	48	50	56	54	54	52	46	48	52	54	56	56	58	44	40	42	44	54	56	54	52.9
Point Pleasant	Maximum	97	90	89	91	95	95	88	82	85	82	86	90	86	88	85	87	87	86	92	95	95	83	85	84	74	85	89	90	86	74	77	87.0
	Minimum	70	71	57	60	62	65	65	66	61	53	55	56	60	66	67	60	58	49	50	56	57	62	64	62	52	44	49	62	61	63	60	59.5
Powellton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Robertsburg§	Maximum	94	87	88	90	95	93	88	82	81	82	86	89	86	88	89	87	85	85	91	92	96	80	85	81	72	81	89	89	82	78	85	86.3
	Minimum	71	71	60	62	63	67	68	67	67	63	56	57	62	67	67	65	61	55	53	58	61	64	66	67	53	47	50	59	60	65	63	61.8
Ryan	Maximum	95	93	85	87	86	93	82	81	80	80	86	87	85	85	86	86	86	86	85	86	87	89	85	80	78	79	86	85	86	80	85	85.2
	Minimum	66	67	56	56	60	67	60	64	60	52	50	50	50	56	63	65	55	48	48	54	61	63	60	52	50	39	44	60	55	60	61	56.5
Spencer§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Union §	Maximum	93	86	87	84	87	88	86	88	82	83	82	84	80	86	85	82	83	85	84	85	88	84	81	79	86	83	87	84	82	80	....	84.5
	Minimum	73	72	69	71	68	71	70	70	68	50	54	61	63	60	61	57	49	50	57	60	60	61	65	63	49	40	43	53	52	60	60	60.0
White Sulphur Spgs.	Maximum	94	92	82	82	85	88	82	83	83	78	80	81	84	83	78	84	81	82	84	84	85	85	81	80	78	78	82	85	85	82	78	82.9
	Minimum	64	63	64	53	55	60	60	60	60	54	50	50	58	55	63	64	62	52	47	54	60	57	64	60	47	42	40	48	52	62	58	56.1
Williamson §	Maximum	96	93	86	87	89	90	84	80	84	77	83	86	86	85	85	80	85	84	88	90	91	84	83	81	76	81	86	86	88	79	85	85.1
	Minimum	72	73	67	65	66	67	67	67	65	60	60	60	64	67	69	68	67	56	58	63	66	65	67	68	59	52	54	55	65	65	65	63.9

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

S1.05
HWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY
NOV 1 1917

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

SEPTEMBER, 1917

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
OCTOBER 23, 1917

Departure of the Mean Temperature from the Normal, September, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

F

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXV. PARKERSBURG, W. VA., SEPTEMBER, 1917. No. 9.

GENERAL SUMMARY.

The past month, with an average temperature of 62.4°, was the coolest September of record for the State. While the month opened warm, cool weather was the rule after the 3d and the low temperature record for the first twelve days in September was broken in many localities on the 11th and 12th, when light to killing frosts occurred, causing much damage to late vegetation and corn in the more elevated sections. While the rainfall averaged nearly normal, over most of the agricultural districts the amounts were light and the conditions were somewhat droughty from the 15th to the 28th. The sunshine was abundant, and the conditions were favorable for harvesting; but the ground was too dry in most sections for fall plowing and seeding. The acreages and yields of potatoes and buckwheat were large, and the corn crop was not much below the average.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.14 and 30.15 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.41 inches on the 11th, and 29.81 inches on the 29th. Elkins, 30.43 inches on the 12th, and 29.77 inches on the 30th.

TEMPERATURE.

The monthly mean for the State, 46 stations reporting, was 62.4°. The mean departure from the normal for 40 stations having ten or more years of record was —3.7°. Warm weather prevailed at the beginning of the month, but cooler weather set in on the 3d and the temperature was continuously below the normal after the 10th, except the 15th, 19th-22d, and 26-27th, with the lowest readings, generally ranging from 32° to 40°, on the 11th and 12th, when light to killing frosts occurred. Unseasonally low temperatures and light to heavy frosts were also noted on the 25th. The highest temperatures were recorded on the 1st and 2d.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 85 per cent; 8 p. m., 77 per cent. The September averages for the same hours for the past 29 years are 84 and 71 per cent, respectively. Elkins, 8 a. m., 92 per cent; 8 p. m., 82 per cent. The September averages for Elkins for the same hours for the past 16 years are 92 and 83 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 66 stations reporting, was 2.79 inches. The departure from the normal for 45 stations having ten or more years of record was —0.21 inch. The rainfall was heaviest over the Great Kanawha, Guyandotte, and Cheat Basins, and lightest over the western portion of the Monongahela Basin and northern Ohio River counties. Practically all the rainfall was received on the 1st, 6-9th, 15-16th, 21st, and 27-28th, the amounts being moderate to heavy in many sections on the 8th and 28th.

WIND.

The average wind velocity at Parkersburg was 4.0 miles per hour, or 0.3 mile below the September average for 27 years. The average at Elkins was 2.9 miles per hour, or 0.1 mile above the September average for 17 years. The highest velocity at Parkersburg was 24 miles per hour from the northwest on the 6th, and at Elkins 17 miles per hour from the west on the 30th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 62 per cent of the possible amount, or 4 per cent above the September average for 20 years. The average at Elkins was 56 per cent, or 4 per cent above the September average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 11th, 12th, 13th, 15th, 18th, 19th, 20th, 24th, 25th, 26th, 27th, and 29th; Brandywine, 11th; Burlington, 11th, 12th, 25th, 26th, and 29th; Charleston, 18th and 25th; Creston, 5th, 7th, 9th, 11th, 12th, 13th, 18th, 19th, 20th, 24th, and 26th; Dam No. 26, 1st, 12th, 13th, 14th, 18th, 19th, 25th, and 26th; Elkins, 1st, 2d, 5th, 11th, 12th, 13th, 17th, 18th, 19th, 20th, 24th, 25th, 26th, 27th, and 29th; Grafton, 18th, 24th, and 29th; Hinton, 2d, 21st, 27th, and 29th; Holcomb, 17th; Huntington, 12th, 18th, 19th, and 25th; Kayford, 4th, 12th, 15th, and 17th; Lewisburg, 22d, 23d, 29th, and 30th; Mannington, 1st, 2d, 3d, 5th, 9th, 11th, 12th, 13th, 14th, 17th, 18th, 20th, 21st, 25th, 26th, 27th, and 29th; Marlinton, 1st, 3d, 7th, 10th, 11th, 12th, 13th, 17th, 18th, 19th, 20th, 23d, and 24th; Morgantown, 3d and 11th; New Cumberland, 2d, 5th, 7th, 9th, 11th, 12th, 13th, 14th, 17th, 18th, 19th, 20th, 22d, 24th, 25th, 26th, 27th, and 29th; Parkersburg, 18th; Robertsburg, 20th, 25th, 26th, and 29th; Romney, 11th, 12th, 16th, 17th, 22d, 23d, 25th, and 26th; Rowlesburg, 1st, 2d, 5th, 7th, 11th, 12th, 13th, 17th, 18th, 19th, 20th, 21st, 22d, 25th, 26th, 27th, and 29th; Saint Marys, 1st, 11th, 18th, 19th, 20th, 21st, and 25th; Smithfield, 5th, 11th, 12th, 13th, 14th, 17th, 18th, 19th, 20th, 21st, 22d, 23d, 24th, 25th, 26th, 27th, 28th, and 29th; Wheeling, 1st, 9th, 11th, 12th, 13th, 14th, 17th, 18th, 19th, 20th, 22d, 24th, 25th, 26th, and 27th.

Hail: Creston, 21st; Pickens, 6th and 21st.

Halos, lunar: Brandywine, 29th; Parkersburg, 28th.

Haze, light: Morgantown, 22d.

Frost, killing: Buckhannon, 11th and 12th; Holcomb, 12th; Pickens, 11th.

Thunderstorms (dates and number of stations reporting): 2d, 3; 3d, 6; 6th, 15; 7th, 3; 8th, 3; 21st, 9.

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	66.8	..	....	1.66	....	. ..	...	..	..	..
1892	64.4	92	32	2.57	....	....	....	..	..	..
1893	65.0	91	29	2.28	4.50	1.05	....	..	..	..
1894	67.8	98	31	2.50	4.75	1.25	....	12	11	7
1895	70.3	107	29	1.70	4.25	0.42	....	17	8	5
1896	65.2	95	22	4.59	9.04	1.58	....	14	9	7
1897	66.4	103	27	1.14	4.00	0.02	....	22	6	2
1898	67.6	97	33	2.42	4.75	0.80	....	16	10	4
1899	64.0	100	26	3.65	6.35	1.65	....	14	9	7
1900	71.1	100	35	1.92	5.50	0.34	....	14	10	6
1901	64.8	95	27	3.35	7.64	1.46	....	13	8	9
1902	64.8	98	25	2.98	4.81	1.23	....	12	9	9
1903	64.7	97	25	1.30	2.78	0.10	....	21	6	3
1904	67.0	95	25	1.76	4.55	0.53	....	16	10	4
1905	65.6	97	29	2.21	4.21	0.54	....	18	8	4
1906	69.9	97	38	3.25	5.44	0.57	....	12	10	8
1907	66.3	93	30	4.41	7.10	2.00	....	12	10	8
1908	65.9	99	24	0.95	2.54	0.26	....	21	6	3
1909	63.7	95	28	2.74	8.75	0.63	....	15	9	6
1910	68.4	97	32	3.50	6.04	0.50	....	12	11	7
1911	68.8	100	32	4.67	8.30	1.80	....	12	11	7
1912	68.6	98	30	3.85	9.18	1.13	....	17	7	6
1913	64.2	100	25	2.88	6.38	0.86	....	14	7	9
1914	63.2	97	24	1.58	5.65	0.17	....	18	6	6
1915	67.6	100	31	3.84	7.18	2.00	....	16	8	6
1916	63.0	99	27	3.71	7.88	1.01	....	18	6	6
1917	62.4	98	23	2.79	6.62	1.16	T.	17	7	6
Means and extremes ..	66.2	107	22	2.75	9.18	0.02	T.	16	8	6

Climatological Data for September, 1917.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	55.8	−4.5	79	1†	23	11	44	3.78	+0.35	1.21	0	11	6	8	16	w.	G. C. Dixon.
Brandywine	Pendleton		0	61.4		89	2	30	12	44	2.16		0.93	0	6	22	0	8	n.	Elmer Keister.
Burlington	Mineral	875	22	59.8	−4.9	87	2	32	11	37	3.03	+0.18	1.21	0	6	10	15	5	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27								1.21	−1.63	0.61	0	2				w.	S. W. Lightner.
Martinsburg	Berkeley	435	24	61.4	−5.1	89	2	32	11	35	2.60	−0.21	0.83	0	7	16	10	4	n.	G. W. Van Metre, C. E.
Moorefield [a]	Hardy	900	20	63.6	−3.2	98	2	34	11	48	1.31	−1.33	0.43	0	8	24	0	5		M. S. Henkel.
Piedmont	Mineral	919	0	60.8		86	1†	39	11†	35	2.62		0.95	0	8	13	13	4	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	19	62.0[a]	−4.5	92[a]	2	31[a]	11	44[a]	2.79	+1.30	1.10	0	6	10	16	4		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	61.2	−4.9	87	1†	33	11†	41	2.63	+0.25	0.70	0	5	7	15	8	w.	J. M. Mallow.
Averages and	extremes			60.8	−4.5	98	2	23	11	48	2.46	−0.30	1.21	0	7	13	10	7	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	64.2	−3.9	86	15	39	11	36	1.28	−1.11	0.50	0	6	22	7	1		J. D. Riggs.
Brandonville	Preston	1,809	6								3.80		1.00	0	7					W. T. Miller.
Buckhannon	Upshur	1,411	20	61.1	−3.3	83	2†	34	11	35	3.05	−0.09	0.82	0	7	21	5	4		H. A. Darnall.
Central Station	Doddridge	950	19																	D. H. Doak.
Cortland	Tucker	3,300	1								3.04		1.00	0	6					Samuel Harmon
Creston	Wirt	701	15	63.4	−4.1	87	1	38	11	38	3.54	+0.80	0.85	0	7	20	4	6	sw.	J. M. Reed.
Davis	Tucker	3,093	8								2.45		1.22	T.	3	13	5	12	w.	Ross C. Male.
Elizabeth	Wirt	646	5								2.88		1.32	0	3					E. D. Ball.
Elkins	Randolph	1,940	16	60.1	−1.5	83	2	34	12	41	2.83	−0.04	0.71	0	9	11	9	10	n.	U. S. Weather Bureau.
Fairmont	Marion	883	11	63.6	−3.7	90	2	36	11	44	1.62	−0.98	0.57	0	9	24	2	4	w.	F. P. Hall.
Glenville	Gilmer	738	23	67.4	−0.3	91	2†	36	11	52	2.99	−0.36	1.15	0	7	19	10	1	w.	Howard R. Brannon.
Grafton	Taylor	1,000	24	62.8	−3.8	89	2	35	11		1.16	−1.80	0.53	0	5	19	8	3	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	61.6	−3.6	88	1	32	11	49	2.17	−0.66	0.75	0	7	23	2	5	w.	Allen Smith.
Mannington	Marion	974	14	60.6	−4.8	84	2	33	11	40	1.30	−2.05	0.62	0	5	20	5	5	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	63.6	−3.9	90	1	34	11	36	2.57	−0.54	1.50	0	6	22	1	7	sw.	R. W. Muldoon.
Moundsville	Marshall	642	14	61.0[a]	−6.6	85[a]	13	36	11	44[a]	2.12	0.43	1.35	0	6	18	7	5	e.	M. Z. White.
New Cumberland	Hancock	987	19	60.4	−5.1	85	2†	33	25	42	2.77	+0.31	1.93	0	4	16	11	3	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	65.2	−3.5	87	2†	37	11	39	1.41	−1.30	0.75	0	4	22	5	3	n.	Wm. Ankrom.
Parkersburg	Wood	638	30	64.0	−2.1	87	2	40	12	33	1.41	−1.31	0.65	0	7	12	12	6	n.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	59.6	−3.7	82	1†	33	11	46	1.96	−1.36	1.36	0	2	19	7	4		J. W. Swisher.
Philippi ††	Barbour	1,149	20																	Okey J. Robinson.
Pickens	Randolph	2,697	14	59.5	−2.3	80	2	32	11	36	4.36	+0.37	1.93	0	10	17	4	9	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30								4.57	+1.62	1.78	0	7				e.	J. F. Pierce.
Saint Marys	Pleasants	577	8								2.14		1.20	0	7				n.	Wm. Hughes.
Smithfield	Wetzel	835	11	60.9	−4.5	86	2	34	11	38	1.59	−1.90	0.63	0	9	23	7	0	se.	G. M. Whisler.
Terra Alta	Preston	2,612	16	57.4	−5.7	79	2	30	11	35	2.72	−1.01	0.96	T.	6	14	15	1	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	60.2	−4.5	87	15	34	11	30	1.85	−1.00	0.77	0	5	20	7	3	w	C. P. Waugh.
Weston	Lewis	1,026	21	63.8	−3.6	85	1†	37	11	44	2.67	−0.34	0.85	0	6	7	19	4		Weston State Hospital.
Wheeling	Ohio	645	30	64.1		91	1	35	11	43	2.05	−0.54	1.25	0	6	23	5	2	sw.	Miss M. B. Forsyth.
Averages and	extremes			62.1	−3.7	91	1†	30	11	52	2.46	−0.62	1.93	T.	6	18	7	5	w.	
Southern Division.																				
Bancroft	Putnam	574	12	64.1	−5.1	86	2	38	11	38	2.49	−0.37	0.90	0	6	22	0	8	ne.	R. E. Dent.
Beckley	Raleigh	2,440	16	62.5	−1.2	85	1	36	10†	40	3.12	+0.43	0.74	0	7	16	8	6	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	63.1	−3.1	82[a]	7	37[a]	11	32[a]	2.75	+0.03	0.94	0	8	17[a]	7[a]	5[a]		Norfolk & Western Ry
Camden-on-Gauley	Webster	2,062	1								1.74		0.80	0	5	17	3	10	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	13	67.6	−2.8	91	2	41	11†	39	3.65	+0.70	1.12	0	9	12	0	18	e.	C. V. Lewis.
Clay	Clay	706	0								1.98		0.78	0	5					Prof. E. H. Knabenshue
Cuba	Jackson	650	14	62.8	−4.0	85	2	35	11	37	1.47	−0.93		0	7	16	12	2	w.	Frank Allen.
Dam 19 O. R.	Wood	557	0								2.16		0.60	0	6					Lockmaster.
Dam 20 O. R.	Wood	551	0								2.42		0.80	0	7					Lockmaster.
Dam 22 O. R.	Jackson	538	1								3.00		0.97	0	7					U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0								1.68		0.50	0	5					U. S. Engineer Office.
Dunlow	Wayne	703	8																	James W. Damron.
Elkhorn	McDowell	1,933	23																	J. J. Lincoln.
Evans	Jackson	606	0	64.4		87	2	37	11	32	2.68		0.61	0	8	17	3	10		B. F. Sayre.
Gary	McDowell	1,426	0								4.54		1.81	0	7					U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	20																	W. H. Gwinn.
Hinton	..do	1,450	19	64.8	−3.3	88	2	41	11	33	4.94	+2.22	1.64	0	10	12	0	18	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	24	61.0		86	2†	32	12	44	2.75			0	6	14	6	10		R. C. Ferguson.
Huntington	Cabell	538	0	65.1	−3.4	86	1†	43	11	33	4.60	+2.25	1.16	0	7	16	5	9	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	0								6.62		2.15	0	13					Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	16	62.0	−2.5	86	2	33	11	39	3.83	+1.08	1.10	0	6	18	9	3	nw.	Geo. T. Argabate.
Logan	Logan	687	13																	Agent C. & O. Ry.
Madison	Boone	704	10																	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	57.4	−4.8	80	2	30	12	38	3.37	+0.17	0.90	0	10	8	14	8	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23																	Miss Donna Tully.
Point Pleasant	Mason	553	23	64.4	−5.1	91	2	34	11	42	3.78	+1.50	1.10	0	7	16	1	13	sw.	W. D. Holmes.
Powellton	Fayette	933	20																	S. C. Lampert.
Rainelle	Kanawha	2,425	0																	C. N. Bobbitt.
Raleigh	Raleigh	2,130	0								5.77		2.44	0	8					Raleigh Coal & Coke Co.
Renick	Greenbrier	1 653	0								2.80		1.50	0	4				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	16	65.6	−2.9	90	2	36	12	43	1.72	−0.68	0.53	0	5	15	7	8		E. C. Brace, Jr.
Ryan	Roane	700	13	64.8	−1.4	87	1*	31	11†	45	2.20	−0.68	0.70	0	7	17	8	5		Wm. E. Ryan.
Sissonville	Kanawha	625	0								2.53		0.80	0	4					J. N. Johnson.
Spencer	Roane	784	12								1.55	−1.63	0.60	0	5	14	12	4		A. M. McKown.
Sutton	Braxton	839	10								3.60	+0.27	1.00	0	6	18[c]	4[c]	3[c]		C. B. Eakle.
Union	Monroe	2,250	12	63.2[b]	−1.9	87[b]	2	35[a]	11†	40[a]	2.75	−0.06	1.10	0	6					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	62.6		86	2†	34	12	40	4.40		1.15	0	9	22	8	0		J. M. Ayres.
Williamson	Mingo	660	16	66.6	−3.2	89	2	44	11	32	4.93	+1.98	2.46	0	8	18	7	5	w.	J. F. Keyser.
Averages and	extremes			63.6	−3.2	91	2	30	12	45	3.19	+0.39	2.46	0	7	16	6	8	w.	
State averages and	extremes			62.4	−3.7	98	2	23	11	52	2.74	−0.21	2.46	T	7	17	7	6	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

r Approximated by the observer.

Daily Precipitation for September, 1917.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac	.05		.45			.80	.18	1.03		.05											.31	.06					.18	.33		.34		3.78
Brandywine	do				T.		.75	.05	.25	T.					T.	T.	.05					.13							.93				2.16
Burlington	do			T.			1.21	*	1.02							T.	T.					.10						*	.70				3.03
Harpers Ferry	do							T	.61								.60																1.21
Martinsburg	do		.40			T.	.14	*	.72							.83											*	.51				2.60
Moorefield	do	.20					.43	.22	.30	.02						.03	.02					.09											1.31
Piedmont	do						.95	.80	.20								.12					.05						.18	.29		.03		2.62
Romney	do						1.10	.15	1.08							T.	.04					.05						.37					2.79
Upper Tract	do						.55	.68	.30										T.			.40						T.	.70				2.63
Northern Division.																																	
Bens Run	Ohio			.37			.12	.06	.11																		.50	.12					1.28
Brandonville	Monongahela	.66						1.00	.93					.34	.30										.26					.31			3.80
Buckhannon	do		T.	.60			.82	.40	.35												T.	.10						.48	.30		T.		3.05
Central Station	Middle Is. Creek																																
Portland	Monongahela	.32		.09	.18			1.00	.65																			.80					3.04
Preston	Little Kanawha	.66		.15				.82	.85													.10	.36						.60				3.54
Davis	Monongahela		T.					1.22	.60													T.						.63	T.	T.			2.45
Elizabeth	Little Kanawha	1.32																					1.00					.56					2.88
Elkins ***	Monongahela			.71			.69	.42	.21						.01						.03	.12						.58	.06		T.		2.83
Fairmont	do	.42		.11	.02		.04	.05	.34	.06												T.	T.					.57		.01			1.62
Glenville	Little Kanawha		.62		.10				1.15	.16												.04	.10						.82				2.99
Grafton	Monongahela			.04			.12	T.	.47																			*	.53				1.16
Lost Creek	do			.57			.56	.03	.22												.04	T.						.51	.24				2.17
Mannington	do			.12			.25	T.	.31													T						.27	.35				1.30
Morgantown	do			.08			1.50	.10	.35													T.						.24	.30		T.		2.57
Moundsville	Ohio			.40			.10	*	1.35																			*	.27				2.12
New Cumberland	do		T.	.08			.59	T.	1.93												T.								T.		.17		2.77
New Martinsville	do			.32					.75																			.12	.22				1.41
Parkersburg ***	Ohio		.10	.04			.65	.07	T.												T.	.03						.42	.10				1.41
Parsons	Monongahela						T.	1.36																				T.	.60				1.96
Philippi	do																																
Pickens	do			T.			1.10	.69	1.24					.02		.05					.40	.09	.03					*	.74				4.36
Rowlesburg	do	1.36						.50	1.58	.20													.28						.60	.05			4.57
Saint Marys	Ohio	.08	.15	.15	T.	T.		1.20	.05	T.	T								T.				.04						.47	T.			2.14
Smithfield	Fishing Creek			.10	.03			.17	.37	.01												.02	.24						.63		.02		1.59
Terra Alta	Monongahela			.05			.96	.88														.05						.30	.48		T.		2.72
Wellsburg	Ohio		.77				.30	.64	.09																			T.	.05		T.		1.85
Weston	Monongahela			.52			.65	.10	.45													.10						.85					2.67
Wheeling	Ohio	T.		1.25			.33	.02	.30													T.							.12		.03		2.05
Southern Division.																																	
Bancroft	Great Kanawha							.36	.90	.12	.05											.23							.83				2.49
Beckley	do				.30		.66	.40	.74	.08												.52						.42					3.12
Bluefield	do							.15	.58	.15	.71							.03					.02					.17	.94				2.75
Camden-on-Gauley	do				.33				.80													.20						.30	.11				1.74
Charleston	do	.38		.20				.12	1.00	.12	.30											.45	.10						.98				3.65
Clay	do																																
Cuba	Sand Creek	.55					.55	.15	.05											T.		.10	.05					.35	.22				1.47
Dam 19 O. R.	Ohio	.55		.30				.60	.05														.08						.58				2.16
Dam 20 O. R.	do	.21		.08				.50	.10													.18	.80						.55				2.42
Dam 22 O. R.	do	.91			.01			.97	.20	.11												.26							.54				3.00
Dam 26 O. R.	do	.50						.18	.45													.08							.47				1.68
Dunlow	Big Sandy																																
Elkhorn	do																																
Evans	Ohio	.02	.43				.61	.51	.52													.11						.25	.23				2.68
Gary	Big Sandy				.37		.37	.38		.06												1.53							1.81	.02			4.54
Green Sulphur Spgs.	Great Kanawha																																
Hinton	do	.22				.24		.32	1.64	.86	.14												.18	.10					1.20	.04			4.94
Holcomb	do					.85		*	*	1.03	T.				T.							T.	T.					*	.87				2.75
Huntington	Ohio	.05		T.			.82	1.16	.50	.22												.94							.88				4.60
Kayford	Great Kanawha	.47			.13			.52	2.15	.42	.29	.01					.65	.05				.33	.22						1.35	.03			6.62
Lewisburg	do						.39	.26	1.10	.53																		.80	.75				3.83
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do			.06	.18		.30	.18	.85	.18					.04		T.					.26						.90	.42		T.		3.37
Nuttallburg	do																																
Point Pleasant	Ohio	1.10		.10				1.00	.33													.40	.15						.70				3.78
Powellton																																	
Rainelle	Great Kanawha																																
Raleigh	do	.38				.41		.25	2.44	.30	.28											.23								1.48			5.77
Renick	do							.20	1.00		.10																		1.50				2.80
Robertsburg	do	.10						.32	.45													.32							.53				1.72
Ryan	do		T.	T.			.32	.70	.20												.05	.12					.49	.32				2.20
Sissonville	do						.47	T.	.80	T.												.48	T.	T.				.78	T.	T.			2.53
Spencer	Little Kanawha					.15	.10	.60								.50					.20							T.					1.55
Sutton	Great Kanawha						.50	.60	1.00													.90							.30	.30			3.60
Union	do			.20			.20	.25		.60	.40																	1.10					2.75
White Sulphur Spgs.	do			.10	.20		.40	.30	1.15	.85												.20						.30	.90				4.40
Williamson	Big Sandy	.25						.75	.58	.31	.40						.08	.10											2.46				4.93

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for September, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	79	79	74	76	69	69	69	67	68	69	67	68	64	76	64	62	68	69	76	79	66	64	56	57	57	71	69	61	64	54		67.7
	Minimum	59	56	53	54	49	48	57	52	50	43	23	29	29	36	51	39	37	39	39	44	54	51	40	39	31	39	38	50	44	42		43.8
Brandywine	Maximum	88	89	85	76	80	83	73	81	76	66	65	74	75	78	73	62	70	77	78	80	82	71	66	65	75	80	83	80	78	68		75.9
	Minimum	64	54	55	50	51	55	58	61	55	55	31	30	31	40	57	51	46	35	40	47	52	55	38	44	35	41	45	41	43	48		46.9
Burlington	Maximum	85	87	80	74	84	76	70	62	65	63	62	70	73	72	65	67	70	75	74	79	77	74	64	59	69	75	78	70	73	74		72.2
	Minimum	64	57	61	57	47	52	57	55	55	43	32	36	37	41	54	54	50	41	47	46	56	48	38	39	34	43	42	52	43	44		47.5
Martinsburg§	Maximum	87	89	79	75	76	75	73	59	65	62	64	72	75	74	58	68	73	77	79	81	80	70	68	66	67	77	79	72	75	64		72.6
	Minimum	64	64	65	57	54	56	55	55	55	53	32	38	40	43	51	52	50	44	44	51	54	52	45	42	43	48	47	50	49	52		50.2
Moorfield	Maximum	96	98	89	84	86	77	70	68	69	68	67	77	80	77	70	68	75	....	84	89	83	75	70	67	77	84	88	80	82	76		78.4
	Minimum	64	50	60	61	48	52	57	58	56	55	34	36	36	42	57	55	49	....	41	44	58	51	38	43	48	44	42	46	44	49		48.9
Piedmont	Maximum	86	86	81	75	76	79	74	70	66	68	72	72	74	71	65	68	72	77	78	81	77	71	64	60	69	77	78	67	75	61		73.9
	Minimum	64	59	62	55	48	54	50	48	45	43	39	40	39	45	55	54	57	43	47	49	55	47	42	44	39	47	46	45	46	47		48.5
Romney	Maximum	90	92	85	81	82	80	69	65	66	65	67	74	75	74	69	70	74	80	82	89	80	73	68	65	71	82	87	....	80	76		76.2
	Minimum	58	60	60	56	52	50	55	55	54	52	31	36	38	45	55	54	49	40	45	45	50	50	39	40	36	48	43	....	44	50		47.9
Upper Tract	Maximum	87	86	86	87	87	84	78	77	75	70	70	74	76	75	73	74	70	69	75	80	79	78	76	74	74	79	80	79	79	78		77.6
	Minimum	60	59	48	46	46	53	58	59	54	50	33	33	36	41	55	55	54	51	42	43	43	54	38	46	35	45	43	43	42	41		46.9
Northern Division.																																	
Bens Run	Maximum	80	85	80	76	75	79	75	70	78	68	66	74	82	83	86	76	73	77	80	82	74	75	75	77	81	74	68	78	77	65		76.3
	Minimum	65	65	63	58	49	57	55	63	56	48	39	42	46	49	59	55	49	50	54	52	48	47	44	45	49	52	55	48	49	49		52.0
Buckhannon	Maximum	81	83	83	74	74	77	74	71	74	69	59	67	74	77	79	70	69	72	72	76	75	69	67	69	70	74	77	64	70	60		72.3
	Minimum	60	60	60	59	46	60	59	65	60	52	34	35	40	42	59	52	43	41	43	48	65	49	43	38	38	43	44	63	45	50		49.9
Creston	Maximum	87	84	82	75	85	80	75	73	78	70	68	68	69	70	80	77	73	76	73	76	73	72	75	75	76	80	71	68	74	66		75.0
	Minimum	62	62	64	62	64	65	64	66	60	53	38	39	39	40	57	55	47	48	47	48	49	48	46	43	43	42	50	58	48	50		51.9
Elkins	Maximum	82	83	80	74	75	75	75	74	75	59	61	71	79	79	77	65	70	74	74	79	75	71	65	70	76	77	81	62	75	57		73.0
	Minimum	59	57	58	53	49	49	59	61	59	38	34	34	38	40	58	50	42	42	44	42	54	51	42	37	37	42	44	49	45	48		47.2
Fairmont§	Maximum	87	90	83	77	78	80	81	73	78	63	67	76	86	86	87	78	78	80	82	85	81	73	75	72	80	83	82	66	75	62		78.1
	Minimum	64	63	61	58	48	51	53	57	55	51	36	38	42	45	50	55	47	46	47	47	53	47	43	41	41	43	47	49	47	49		49.1
Glenville	Maximum	90	91	88	86	83	85	78	78	83	80	70	90	88	88	91	90	82	83	85	88	84	84	80	79	84	87	86	68	80	80		83.6
	Minimum	63	61	64	60	50	53	61	67	59	54	36	38	50	52	59	53	44	46	45	45	58	48	44	40	40	45	45	59	48	49		51.2
Grafton	Maximum	88	89	83	76	79	79	72	74	75	71	65	76	81	80	82	71	75	78	78	85	80	75	72	69	82	84	80	65	76	67		76.9
	Minimum	61	60	63	58	48	43	54	56	56	53	35	38	40	41	62	54	45	46	49	47	55	48	41	41	38	45	43	48	47	50		48.8
Lost Creek	Maximum	88	87	80	75	79	78	76	74	80	70	65	73	84	84	83	73	72	78	78	82	80	75	73	72	77	81	80	70	74	62		76.8
	Minimum	60	58	60	56	44	50	57	67	56	52	32	33	35	38	44	53	40	42	44	40	45	50	39	34	36	40	41	51	44	48		46.3
Mannington	Maximum	81	84	77	73	74	77	75	71	75	68	60	70	78	80	80	75	72	75	76	79	76	68	69	65	73	77	75	64	71	61		73.7
	Minimum	60	61	61	54	44	52	50	63	55	50	33	37	38	40	58	51	44	45	48	46	54	42	40	37	35	43	44	57	44	47		47.8
Morgantown	Maximum	90	89	80	75	78	76	76	70	77	70	61	73	79	82	79	71	76	73	79	81	78	74	66	65	76	81	81	66	74	63		75.3
	Minimum	63	62	59	52	43	48	59	60	54	48	34	37	53	52	60	55	45	46	55	60	58	44	56	46	44	60	51	54	48	54		52.0
New Cumberland	Maximum	84	85	79	71	74	73	69	66	75	69	64	72	79	82	77	73	74	76	79	85	68	67	69	67	74	80	76	70	73	66		73.9
	Minimum	63	61	59	54	41	58	42	54	51	43	34	39	38	42	54	51	44	42	46	55	58	40	41	40	33	38	43	53	48	42		46.9
New Martinsville	Maximum	86	87	83	79	77	78	77	73	80	73	68	77	83	86	87	83	78	80	82	82	79	73	77	75	79	84	79	76	75	72		78.9
	Minimum	63	65	62	57	49	55	53	62	56	50	37	40	44	47	60	54	51	51	53	53	58	48	46	43	42	47	50	56	47	48		51.6
Parkersburg	Maximum	85	87	80	74	76	83	75	70	75	62	62	71	78	81	83	72	74	76	80	81	79	71	72	71	75	79	74	69	74	63		75.1
	Minimum	63	65	65	58	53	60	58	60	56	47	41	40	45	49	62	55	52	49	52	51	60	52	50	48	43	48	55	53	47	49		52.9
Parsons	Maximum	82	82	79	72	74	72	73	72	76	61	62	72	81	77	81	67	74	74	75	78	76	75	75	69	76	78	79	61	73	58		73.5
	Minimum	60	60	61	58	47	49	50	60	57	41	33	35	35	34	54	45	42	44	47	45	45	44	37	36	34	43	41	49	45	44		45.8
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum	75	80	76	69	72	74	68	67	67	58	61	76	75	76	77	67	72	71	67	74	69	67	66	67	77	76	77	59	77	53		70.3
	Minimum	60	57	58	55	46	52	57	62	58	40	32	40	42	55	54	49	49	43	44	44	55	50	45	40	44	47	45	49	45	45		48.7
Terra Alta	Maximum	78	79	76	70	71	68	69	70	72	64	57	66	72	70	67	63	68	69	70	74	71	66	60	54	70	74	75	60	68	55		68.2
	Minimum	60	58	57	54	45	52	50	56	50	42	30	31	37	47	52	49	48	40	45	45	55	45	41	42	40	46	43	49	45	45		46.6
Wellsburg	Maximum	79	81	72	70	68	72	71	67	71	66	58	61	74	75	87	74	70	71	73	76	69	64	68	65	69	74	70	64	67	61		70.2
	Minimum	62	65	60	54	46	57	47	55	53	44	34	41	45	50	57	56	54	45	50	53	58	45	44	45	41	45	53	50	48	46		50.1
Weston	Maximum	85	85	84	82	77	79	75	76	78	70	65	75	84	83	82	80	73	78	80	83	79	74	73	73	77	80	77	75	75	74		77.7
	Minimum	62	61	60	59	48	54	60	67	60	53	37	38	40	44	61	55	45	45	45	44	59	51	43	39	40	43	45	45	46	46		49.8
Wheeling§	Maximum	91	84	81	80	79	79	79	70	81	68	71	78	84	88	88	88	80	80	80	88	80	77	78	77	78	85	75	75	78	65		79.5
	Minimum	62	65	60	56	46	49	49	54	53	49	35	36	43	45	48	54	49	48	49	52	59	45	40	45	42	42	47	50	44	45		48.7
Southern Division.																																	
Beckley	Maximum	85	84	84	80	81	79	79	78	79	70	71	70	71	78	78	77	78	76	79	80	80	80	78	79	78	83	83	79	77	67		78.0
	Minimum	59	58	59	58	49	50	59	57	50	36	36	38	41	48	47	46	44	45	48	47	48	49	40	40	38	45	46	40	47	42		47.0
Bluefield	Maximum	80	80	80	79	78	79	82	77	77	76	64	70	72	75	72	75	76	76	75	76	75	70	67	68	72	....	74	75	75	70		74.3
	Minimum	62	60	64	56	55	55	60	61	63	52	37	38	43	55	58	56	49	50	44	48	52	50	50	48	47	....	46	56	50	40		51.9
Charleston	Maximum	90	91	90	87	89	87	85	88	85	78	75	74	78	80	86	82	81	87	89	82	82	84	86	80	80	82	80	79	81	79		83.2
	Minimum	61	60	62	61	54	55	60	65	60	57	41	42	42	45	50	52	52	51	51	52	51	52	48	41	45	49	49	52	51	48		52.0
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum																																
	Minimum																																
Hinton§	Maximum	85	88	86	78	81	86	76	80	80	63	66	71	76	75	78	78	74	78	79	83	81	76	68	68	74	74	82	79	72	60		76.5
	Minimum	64	62	64	62	56	55	57	63	65	58	41	42	44	44	53	60	48	49	50	50	51	55	46	45	45	45	49	49	62	58		53.1
Holcomb§	Maximum	83	86	86	77	79	81	76	70	65	62	65	73	79	80	78	81	75	77	78	80	77	73	70	74	77	79	82	64	75	67		75.6
	Minimum	59	55	58	55	45	48	53	60	56	53	35	32	35	41	48	50	42	39	39	41	47	55	43	38	37	41	44	55	47	40		46.4
Huntington§	Maximum	86	86	85	78	80	84	74	75	75	65	65	72	78	79	83	77	75	76	77	78	75	72	72	72	72	77	68	67	71	64		75.3
	Minimum	66	65	67	66	55	58	65	65	63	57	43	44	45	50	52	61	54	53	52	52	54	57	51	49	48	48	50	56	52	50		54.9
Lewisburg	Maximum	85	86	83	78	80	85	77	77	76	72	67	73	73	72	76	69	75	77	78	78	76	71	67	66	70	75	77	68	75	71		75.1
	Minimum	63	55	56	56	54	49	58	65	65	51	33	35	37	46	60	56	42	38	40	42	54	51	41	46	40	43	40	50	47	49		49.0
Marlinton	Maximum	76	80	78	70	72	74	68	74	70	62	58	68	70	68	72	64	66	68	68	74	68	66	60	62	68	70	76	64	70	56		68.7
	Minimum	56	58	60	58	54	48	50	52	60	38	32	30	36	40	54	48	42	38	40	42	52	52	42	38	36	42	44	54	44	46		46.2
Point Pleasant	Maximum	88	91	86	79	82	87	75	75	81	68	67	76	82	82	88	79	79	81	84	81	81	76	77	76	78	85	73	72	78	66		79.1
	Minimum	61	61	63	58	46	56	58	65	57	52	34	37	40	40	56	56	45	47	47	47	57	46	45	40	40	44	49	54	46	43		49.7
Powellton	Maximum																																
	Minimum																																
Robertsburg§	Maximum	88	90	85	78	81	85	78	74	78	65	68	78	84	85	87	79	81	80	85	83	81	75	74	79	79	85	73	69	77	65		79.0
	Minimum	64	63	65	63	51	54	63	68	62	56	37	36	41	42	51	59	47	47	49	48	53	51	47	44	41	45	50	57	59	50		52.1
Ryan	Maximum	87	86	85	84	84	85	80	81	78	76	75	76	76	80	84	87	81	82	80	86	85	84	79	78	81	84	82	78	77	71		81.1
	Minimum	56	57	63	61	48	53	60	66	60	59	31	31	32	50	54	59	42	43	42	42	54	57	42	37	36	39	46	55	42	41		48.6
Spencer§	Maximum																																
	Minimum																																
Union§	Maximum	86	87	78	85	83	82	83	85	79	68	75	73	71	73	71	80	75	77	78	76	77	80	78	....	80	78	78	75	78	....		78.2
	Minimum	58	62	65	57	60	59	57	59	52	54	35	35	38	44	54	41	41	44	43	40	42	40	41	45	..	46	48	46	52	42		48.3
White Sulphur Spgs.	Maximum	85	86	86	80	80	83	75	79	75	71	67	72	72	70	75	68	73	77	78	80	78	70	67	69	69	77	78	77	79	78		75.8
	Minimum	57	59	56	66	57	50	55	65	63	55	35	34	36	45	60	57	43	40	42	40	53	54	43	44	39	45	45	43	49	50		49.3
Williamson§	Maximum	86	89	85	82	81	80	81	80	73	64	66	74	79	80	80	79	76	78	79	79	77	76	68	75	75	79	69	67	74	64		76.5
	Minimum	66	67	67	68	60	60	62	66	69	61	44	45	47	50	55	60	53	54	55	55	55	58	55	50	50	50	53	55	58	50		56.6

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

Help Your Country and Yourself!
Save Your Money to **BUY A GOVERNMENT BOND** of the **SECOND LIBERTY LOAN.**

S 7.35
NWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

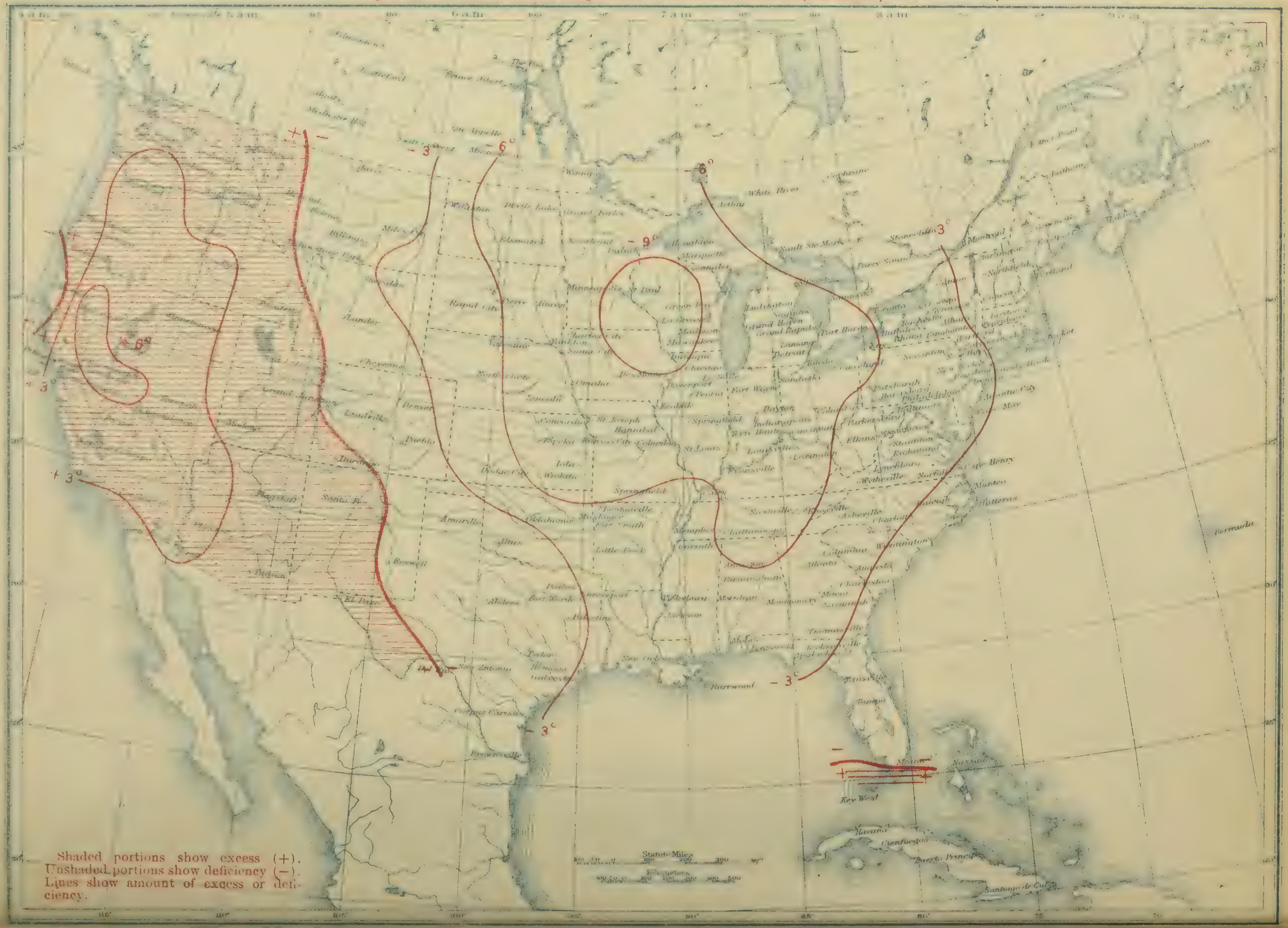
WEST VIRGINIA SECTION

OCTOBER, 1917

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
NOVEMBER 26, 1917

Departure of the Mean Temperature from the Normal, October, 1917.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXV. PARKERSBURG, W. VA., OCTOBER, 1917. No. 10.

GENERAL SUMMARY.

The past month, with an average temperature of 49.2°, was the coolest October since 1895. The temperature was continuously below the normal, except three short periods. Freezing temperatures occurred in most sections on the 2d and at short intervals during the month. The precipitation also averaged 1.71 inches above the normal and the snowfall was more than four times greater than for any other October of record. The month was especially wet after the 18th, greatly retarding farm work. Owing to the unfavorable conditions, the wheat acreage is considerably smaller than anticipated and early sown wheat was in fair to poor condition at the close of the month. A heavy snow storm on the 24th caused the loss of considerable fruit. Much fruit also rotted on the ground, owing to the scarcity of farm labor.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.09 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.36 inches on the 6th, and 29.52 inches on the 29th. Elkins, 30.40 inches on the 6th, and 29.47 inches on the 30th.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 49.2°. The departure from the normal for 38 stations having ten or more years of record was —5.8°. The month was continuously cool, except the 3d-4th, 14-19th, and 29th, and the minus daily departures from the normal were about 10° from the 6th to the 11th, 20th to the 25th, and on the 30th and 31st. The highest temperatures occurred generally on the 17th and 18th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 82 per cent; 8 p. m., 73 per cent. The October averages for the same hours for the past 29 years are 83 and 70 per cent, respectively. Elkins, 8 a. m., 84 per cent; 8 p. m., 75 per cent. The October averages for Elkins for the same hours for the past 17 years are 89 and 78 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 60 stations reporting, was 4.35 inches. The departure from the normal for 42 stations having ten or more years of record was +1.64 inches. Rain was quite general on the 4-5th, 8-9th, 11-12th, 18-19th, 27th, and 29-30th, and the amounts received were moderately heavy on the 12th and 30th. Snow flurries occurred in most localities on the 12th and the greatest snowfalls of record for October were received on the 24th. Heavy rain also fell in many sections on the 24th. The following heavy monthly snowfalls were noted: Davis, 15.5 inches; Beckley, Cheat Bridge, Cortland, and Pickens, 15.0 inches; Morgantown and Rowlesburg, 12.0 inches; Holcomb and Terra Alta, 11.0 inches; Moundsville, 10.0 inches.

WIND.

The average wind velocity at Parkersburg was 5.9 miles per hour, or 1.0 mile above the October average for 27 years. The average at Elkins was 4.7 miles per hour, or 1.4 miles above the October average for 17 years. The highest velocity at Parkersburg was 28 miles per hour from the south on the 29th, and at Elkins 32 miles per hour from the west on the 30th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 45 per cent of the possible amount, or 5 per cent below the October average for 20 years. The average at Elkins was 51 per cent, or 6 per cent above the October average for 17 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 3d, 14th, 15th, 16th, 22d, 23d, and 28th; Bayard, 26th; Charleston, 3d, 8th, 9th, 10th, 15th, 16th, 17th, and 21st; Creston, 1st, 2d, 7th, 9th, 22d, 27th, and 28th; Dam No. 26, 2d and 22d; Elkins, 2d, 3d, 7th, 10th, 14th, and 21st; Glenville, 22d; Grafton, 17th; Hinton, 2d, 5th, 11th, and 27th; Huntington, 2d; Kayford, 3d; Lewisburg, 10th and 11th; Mannington, 2d, 7th, 9th, 11th, and 26th; Marlinton, 1st, 2d, 3d, 7th, 10th, 15th, 16th, 17th, 21st, and 29th; Morgantown, 2d; New Cumberland, 2d and 18th; Parkersburg, 11th; Robertsburg, 22d, 26th, and 28th; Romney, 3d and 27th; Rowlesburg, 2d, 3d, 7th, and 9th; Smithfield, 2d, 11th, 17th, 18th, and 22d; St. Marys, 2d; Wheeling, 2d; Williamson, 1st and 22d.

Hail: Moorefield, 30th.

Halos, lunar: Evans, 2d; Grafton, 25th; Parkersburg, 25th.

Halos, solar: Evans, 2d; Pickens, 3d.

Haze, light: Morgantown, 11th.

Sleet: Evans, 12th and 30th; Smithfield, 12th.

Smoke, light: Creston, 16th and 17th; Lost Creek, 17th.

Thunderstorms (dates and number of stations reporting): 3d, 1; 14th, 2; 15th, 4; 24th, 1; 27th, 2; 28th, 2; 29th, 7; 30th, 3.

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	51.5	95	21	1.97	2.91	T.	....	..	..	..
1892	52.6	89	24	0.83	1.45	0.21	....	..	..	..
1893	54.1	86	16	4.74	7.22	1.00	....	21	6	4
1894	54.4	88	22	2.32	3.85	1.17	T.	16	8	7
1895	48.1	89	8	1.29	2.25	0.16	T.	22	5	4
1896	51.0	82	20	2.08	4.37	0.45	T.	14	9	8
1897	58.2	95	22	0.53	2.27	0.07	....	18	7	6
1898	55.6	95	19	4.84	8.50	2.48	T.	11	10	10
1899	56.8	91	19	1.42	3.81	0.23	0	15	7	9
1900	60.9	97	24	2.33	4.80	1.15	0	16	8	7
1901	54.3	86	19	0.54	1.95	0.12	0	19	6	6
1902	56.5	87	17	2.63	5.50	0.90	T.	16	8	7
1903	54.2	96	15	2.55	4.75	0.80	T.	17	7	7
1904	54.5	92	16	1.59	3.02	0.37	T.	18	8	5
1905	54.2	95	19	4.71	8.26	2.46	T.	13	8	10
1906	54.5	86	12	3.09	8.15	1.64	1.3	11	6	14
1907	50.3	87	19	2.65	5.12	0.54	0.1	15	9	7
1908	55.1	91	16	1.60	6.88	0.33	T.	18	7	6
1909	50.0	88	14	2.79	5.27	0.60	0.1	16	7	8
1910	58.1	95	15	1.85	2.96	0.80	0.7	18	7	6
1911	56.3	88	23	5.28	9.65	3.27	0	12	7	12
1912	55.5	93	20	1.34	3.10	0.20	T.	18	7	6
1913	54.5	92	12	4.50	8.11	1.78	0.3	12	6	13
1914	57.3	91	14	2.94	6.72	1.37	T.	12	8	11
1915	56.6	89	20	4.11	5.55	0.74	T.	17	7	7
1916	54.1	97	16	2.38	4.35	0.91	T.	19	5	7
1917	49.2	89	16	4.35	6.49	1.18	5.5	15	6	10
Means and extremes ..	54.4	97	8	2.64	9.65	T.	0.3	16	7	8

Climatological Data for October, 1917.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	42.5	−6.7	73	29	17	21	43	3.56	+0.15	1.30	14.0	11	11	7	13	w.	G. C. Dixon.
Brandywine	Pendleton		0	48.8	.....	80	15	18	31	48	3.31	.....	0.94	4.0	7	22	3	5	s.	Elmer Keister.
Burlington††	Mineral	875	22	.....	.....	.....	.....	.....	.....	.....	2.90	+0.70	.....	.....	.....	.....	.....	.....	.....	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27	.....	.....	.....	.....	.....	.....	.....	6.19	+3.35	2.10	T.	7	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	24	48.4	−6.2	79	15	26	31	49	6.08	+3.49	3.12	.....	8	18	7	6	nw.	G. W. Van Metre, C. E.
Moorefield [b]	Hardy	900	20	51.5	−3.2	85	15	21	14	57	3.46	+1.26	1.32	.....	4	24	0	5	.....	M. S. Henkel.
Piedmont	Mineral	919	0	48.2	.....	79	18	23	21	42	2.17	.....	1.04	.....	9	16	11	4	se.	C. A. Suter, Jr.
Romney	Hampshire	824	19	51.1	−3.7	89	15	20	21	50	3.38	+0.99	1.25	6.0	5	15	13	3	...	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	51.2[c]	−4.4	77[c]	1	20[c]	25†	52[c]	2.60	+0.32	0.90	.....	4	22	5	4	w.	J. M. Mallow.
Averages and	extremes	.....	.....	48.8	−4.8	89	15	17	21	57	3.84	+1.59	3.12	6.0	7	18	7	6	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	50.1	−6.2	81	17†	28	26†	43	6.28	+4.12	1.67	5.0	12	17	5	9	.....	J. D. Riggs.
Brandonville ††	Preston	1,809	6	.....	.....	.....	.....	.....	.....	.....	2.87	.....	1.02	.....	6	.....	.....	.....	.....	W. T. Miller.
Buckhannon	Upshur	1,411	20	48.0	−5.1	76	18	25	21†	39	3.57	+0.33	1.15	5.0	8	18	4	9	.....	H. A. Darnall.
Central Station	Doddridge	950	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. H. Doak.
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	3.33	.....	1.50	15.0	5	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	15	49.7	−5.6	82	18	27	26	43	4.55	+1.86	2.05	2.0	12	16	5	10	w.	J. M. Reed.
Davis	Tucker	3,093	8	.....	.....	.....	.....	.....	.....	.....	5.17	.....	1.20	15.5	10	11	2	18	w.	Ross C. Male.
Elizabeth	Wirt	646	5	.....	.....	.....	.....	.....	.....	.....	6.04	.....	2.21	.....	11	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,940	16	47.3	−4.1	77	18	21	21	49	2.97	+0.55	0.79	4.8	14	6	14	11	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	49.0	−6.1	85	17†	27	14	45	4.04	+1.45	1.51	3.0	13	18	3	10	w.	F. P. Hall.
Glenville	Gilmer	738	23	52.4	−3.0	88	18	25	21	49	4.29	+1.39	1.87	2.0	9	13	11	7	w.	Howard R. Brannon.
Grafton	Taylor	1,000	24	50.4	−4.8	84	17	25	11	49	4.25	+1.45	1.27	.....	9	13	11	7	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	49.2	−5.2	83	18	20	26	50	3.91	+1.39	1.56	2.0	10	18	1	12	w.	Allen Smith.
Mannington	Marion	974	14	48.8	−5.0	82	18	25	14†	47	4.57	+1.90	1.45	5.4	13	9	11	11	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	51.6[k]	−3.6	83[b]	18	29[k]	24	40[k]	4.30	+1.20	1.30	12.0	10	10	2	19	sw.	R. W. Muldoon.
Moundsville	Marshall	642	14	48.4[a]	−7.5	81[a]	17	28	26†	49[a]	3.85	+3.01	1.50	10.0	10	8	9	14	sw.	M. Z. White.
New Cumberland	Hancock	987	19	47.6[g]	−6.6	80[a]	18	25[a]	14†	47[a]	6.29	+3.57	2.30	2.0	13	5	16	10	sw.	M. F. Smith.
New Martinsville	Wetzel	634	23	51.0	−5.8	83	18	28	14†	43	6.25	+3.66	1.80	8.0	11	14	6	11	s.	W. Ankrom.
Parkersburg	Wood	638	30	50.0	−4.6	84	17	29	30	37	4.77	+2.33	1.95	5.0	13	7	14	10	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	46.3[c]	−6.3	81[c]	17	19[c]	22	51[c]	4.21	+1.47	1.49	8.0	.....	12	6	8	.....	J. W. Swisher.
Philippi ††	Barbour	1,149	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Okey J. Robinson.
Pickens	Randolph	2,697	14	48.0	−4.2	88	18	20	31	52	5.25	+1.47	1.40	15.0	11	17	5	9	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30	.....	.....	.....	.....	.....	.....	.....	4.02	+1.14	0.87	12.0	15	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	8	.....	.....	.....	.....	.....	.....	.....	6.06	.....	1.34	.....	13	.....	.....	.....	w.	Wm. Hughes.
Smithfield	Wetzel	835	11	47.0	−6.5	83	18	26	14†	46	5.25	+1.90	1.68	6.5	13	20	5	6	sw.	G. M. Whisler.
Terra Alta	Preston	2,612	16	44.9	−6.8	77	18	19	31	49	3.20	−0.18	1.05	11.0	8	14	13	7	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Waugh
Weston	Lewis	1,026	21	51.2	−3.7	82	17†	26	26	46	3.67	+0.68	1.40	.....	10	6	18	7	...	Weston State Hospital.
Wheeling	Ohio	645	30	48.2	.....	82	18	27	31	50	6.50	+4.07	1.70	5.5	15	13	8	10	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	.....	48.9	−5.3	88	18	19	22†	52	4.74	+1.85	2.30	7.2	11	13	8	10	w.	
Southern Division.																				
Bancroft	Putnam	574	12	49.6	−7.8	82	17†	26	31	50	4.97	+2.08	2.10	1.0	9	20[a]	1[a]	9[a]	ne.	R. E. Dent.
Beckley	Raleigh	2,440	16	55.5[a]	.....	81[a]	18	25[a]	22†	49[a]	4.97	+2.88	1.66	15.0	6	14	1[b]	14[a]	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	49.4	−6.1	75	16†	20	31	40	3.74	+1.06	1.25	9.5	10	20	3	8	....	Norfolk & Western Ry
Camden-on-Gauley	Webster	2,062	1	.....	.....	.....	.....	.....	.....	.....	1.18	.....	0.50	7.0	5	16	9	15	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	13	54.8	−3.8	80	29	29	25	45	5.00	+2.34	1.34	T.	12	12	0	19	w.	C. V. Lewis.
Clay	Clay	706	0	.....	.....	.....	.....	.....	.....	.....	3.96	.....	0.92	T.	7	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba	Jackson	650	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Frank Allen.
Dam 19 O. R.	Wood	557	9	.....	.....	.....	.....	.....	.....	.....	5.15	.....	1.46	.....	13	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	0	.....	.....	.....	.....	.....	.....	.....	5.48	.....	1.40	.....	11	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	1	.....	.....	.....	.....	.....	.....	.....	4.86	.....	1.29	.....	10	.....	.....	.....	.....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0	.....	.....	.....	.....	.....	.....	.....	5.08	.....	1.38	0.5	10	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	23	49.8	−6.0	75	17	23	31	35	3.31	+0.75	0.86	2.0	7	17	6	8	w.	J. J. Lincoln.
Evans	Jackson	606	0	52.0	.....	82	18	29	7	58	5.77	.....	2.44	0.5	13	16	1	14	.....	B. F. Sayre.
Gary ††	McDowell	1,426	0	.....	.....	.....	.....	.....	.....	.....	3.11	.....	0.69	.....	13	.....	.....	.....	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Hinton	do	1,450	19	48.3	−8.2	80	16	21	31	44	3.28	+0.85	1.36	2.0	10	16	2	13	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	24	47.9	.....	78	18	23	22	50	4.68	.....	1.34	11.0	11	12	6	13	.....	R. C. Ferguson.
Huntington	Cabell	538	0	47.8	−8.3	79	18	29	31	39	4.66	+2.29	2.26	1.0	10	16	4	11	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	0	.....	.....	.....	.....	.....	.....	.....	3.51	.....	1.07	4.0	10	.....	.....	.....	.....	Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	16	47.4	−5.9	77	16	21	31	44	2.26	−0.38	0.80	T.	6	16	5	10	nw.	Geo. T. Argabate.
Logan	Logan	687	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	42.7	−7.7	70	15†	16	31	46	3.29	+0.43	1.42	3.0	12	11	11	9	nw.	S. L. Brown.
Nuttallburg	Fayette	2,252	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	23	50.1	−7.2	85	17	26	26†	45	5.16	+2.66	2.50	.....	11	14	2	15	nw.	W. D. Holmes.
Powellton	Fayette	933	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. C. Lampert.
Rainelle	Kanawha	2,425	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. N. Bobbitt.
Raleigh	Raleigh	2,130	0	.....	.....	.....	.....	.....	.....	.....	3.83	.....	1.06	7.5	10	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	0	.....	.....	.....	.....	.....	.....	.....	3.43	.....	1.30	3.0	5	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	16	50.0	−7.2	85	17	28	26†	51	4.18	+1.53	1.53	1.0	11	17	5	9	.....	E. C. Brace, Jr.
Ryan	Roane	700	13	50.4	−4.0	85	18	24	14†	47	5.19	+2.05	2.22	5.0	12	17	4	10	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. M. McKown.
Sutton	Braxton	839	10	49.8	−9.4	84	15†	30	12†	42	3.78	+0.65	0.93	4.0	8	22	4	5	.....	C. B. Eakle.
Union	Monroe	2,250	12	49.2	−4.2	79	16	21	31	49	3.63	+0.32	0.70	7.0	8	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	49.7	.....	81	18	19	21†	44	3.85	.....	1.15	4.0	7	21	1	9	..	J. M. Ayres.
Williamson	Mingo	660	16	50.9	−7.5	84	17	25	31	41	3.80	+1.27	1.77	0.5	9	17	6	8	w.	J. F. Keyser.
Averages and	extremes	.....	.....	49.7	−6.7	85	17†	16	31	51	4.14	+1.37	2.50	3.8	9	16	4	11	w.	
State averages and	extremes	.....	.....	49.2	−5.7	89	15	16	31	57	4.35	+1.64	2.50	5.5	10	15	6	10	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

z Approximated by the observer.

Daily Precipitation for October, 1917.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac				.21	.15	.05		.06				.26							.76	.01				1.30	.02			.40		.34		3.56
Brandywine	do						.02			.07			.18							.94					.90			.30			.90		3.31
Burlington	do																																
Harpers Ferry ‖	do					.95				T.			T.	.45						1.10					2.10	.69			.55		1.25		6.19
Martinsburg	do				.08				T.				.42							.70				*	3.12			.70			1.02	.04	6.08
Moorefield	do																			1.32					.85		.39				.90		3.46
Piedmont	do				.03	.05							.12							1.04	T.			.45	.08			.05	.06		.29		2.17
Romney	do					T.			T.				.23							.72					1.25			.35			.83		3.38
Upper Tract	do																						.80		*	.90					.90		2.60
Northern Division.																																	
Bens Run	Ohio			.10	.18	.11			.15			.26	.64							1.67				.71	.52		.52	.50			.87		6.23
Brandonville ‖	Monongahela				.50		.20			.05			.10							1.60					1.02								2.87
Buckhannon	do				.20	.10							.60							1.15				.20	.60	T.	T.	.36			.36		3.57
Central Station	Middle Is. Creek																																
Cortland	Monongahela				.40								.33												1.50		.38		.72				3.33
Creston	Little Kanawha				.17	.13			.04	.10		.13	.37	T.						1.10	.95				.65	.26			.35		.30	T.	4.55
Davis ‖	Monongahela					.21		.24		.09		T	.35							T.	.95			T.	1.20	.20			.90		.88	.15	5.17
Elizabeth ‖	Little Kanawha				.25	.14				.14		.10	.61							2.21	.49				1.03	.10			.42		.52		6.04
Elkins***	Monongahela			T.	.06	.10	.01		.11		.06		.36				.04			.79	T.			.45	.27	.03	T.	.14		.39	.18		2.97
Fairmont ‖	do	T.			.16	.17	.03	T.	T	.26		T	.60	.08		T.				.48	1.03				.58	.12		T.	.24		.25	.04	4.04
Glenville ‖	Little Kanawha				.17	T.	T.			.20			.56	T.						.35	1.52				.75	.11			.18		.42		4.29
Grafton	Monongahela				.12	T			.30			.04	.75							1.27				*	.83			.39		.55	T.		4.25
Lost Creek	do				.06	.04			.24			.12	.70							1.56				.12	.42	T		.04			.61		3.92
Mannington	do				.30	.16			.16			.06	.78			T.				1.45	T			.24	.63	.06		.07	.25	.01	.40		4.57
Morgantown	do				.23	.14	T.		.33				.76			T.	T.			1.50				.18	.80	.04		.06			.26		4.30
Moundsville	Ohio				.60	.10			.20				.60			.10				1.50				.50	1.05			.50			.70		5.85
New Cumberland	do	T.		.07	.60	T.	.14		.10			T.	.63		T.	.12			T.	1.52				.25	2.30	.03		.46	.02	.05	T.		6.29
New Martinsville	do			.15	.40				.15				.70							1.80				.45	.95	.20		.60		.05	.80		6.25
Parkersburg ***	Ohio		T.	.15	.05	.05			.15		.07	T.	.56						.08	1.87				.73	.15		T.	.47	T.	.33	.11		4.77
Parsons	Monongahela		*	*	*			T.	1.36					T.						.56				.80	T.						1.49		4.21
Philippi	do																																
Pickens	do			T.		.08	.32		.31				.63							1.20				.30	.70	.20		.11		1.01	.39		5.25
Rowlesburg ‖	do				.26		.20			.20		.01	.28	.22						.12	.82				.87	.40			.30		.22	.09	4.02
Saint Marys ‖	Ohio				.27	.12		T	.05	.10		.12	.62	T.						1.34	.54				1.10	.22		.04	.52	T.	1.02	T.	6.06
Smithfield ‖	Fishing Creek				.39	.18			.02	.16			.85	.05						.89	.83				.45	.48		.06	.40		.53	T.	5.25
Terra Alta	Monongahela	T.			.28	.17	T		.20				T.							1.05	T.				1.00			.25	.15		.10		3.20
Wellsburg	Ohio																																
Weston	Monongahela				.10				.25				.80							1.40				.10	.50	.12		.10	.20		.10		3.67
Wheeling ‖	Ohio	.03			.58	.05	T.	T.	.02	.17		.06	.48	.01		.20			T.	.92	.82				1.70	.48		T.	.38		.60		6.50
Southern Division.																																	
Bancroft ‖	Great Kanawha				.14	.15						.10	.50		T.					2.10	.45				.72	.08					.73		4.97
Beckley	do					.28		.28													.70	.80				1.66				1.25			4.97
Bluefield	do					.15			.04	.30		.03	.42							1.25				.30	.35	.25					.65		3.74
Camden-on-Gauley ‖	do					.11							.22							.15				.50							.20	T.	1.18
Charleston ‖	do				.02	.20	.10		T.	.30	T.	.12	.60							1.34	1.00			T.	1.00	.10				12	.10		5.00
Clay ‖	do						.26			.52				.66							.47	.77				.92					T.	.36		3.96
Cuba	Sand Creek																																
Dam 19-O. R. ‖	Ohio				.25	.04			.08	.11			.62							1.16	.70				.74	.23		.02	.39	.10	.71	T.	5.45
Dam 20 O. R. ‖	do				.86	.08			.13			.05	.60							1.40	.62				.64	.10			.45		.55		5.48
Dam 22 O. R. ‖	do			.18		.08			.17			.05	.65							1.29	.62				.73				.39		.70		4.80
Dam 26 O. R. ‖	do				.10	.12		.38	T.				.82							1.38	.80				.35	.15			.48		.50		5.08
Elkhorn	Big Sandy					.57			.18	.21		.34	.48							.86				.67	T.								3.31
Evans	Ohio			.02	.18	.07	.03		.08		.06		.66						T.	2.44				.73	.21			.43	T.	.18	.68		5.77
Gary	Big Sandy					.16	.01		.24		.17	.26	.21						.25	.59				.69	.03	.01				.47	.02		3.11
Green Sulphur Spgs.	Great Kanawha																																
Hinton ‖	do						.20			.20		.16	.20	.10						.16	1.20				.58	.02					.46	T.	3.28
Holcomb	do				T.	.22	.18		.28		T.		.54							1.34				*	*	1.04		.05		*	1.03		4.68
Huntington ‖	Ohio				.06	.04			.02	T.		.22	.72							1.70	.56				.42				.42		.50		4.66
Kayford ‖	Great Kanawha				T.		.20	T.		.23		.12	.33							.13	1.07				.90	.29	T.				*	.24	3.52
Lewisburg	do					.25				.23			.53							T.				.25	T.			.20			.80		2.26
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do				.08	.06	T.		.08	.14		.12	.30							1.12				.10	.32		.05	.30			.32		3.29
Nuttallburg	do																																
Point Pleasant ‖	Ohio				.20	.10			.14			.02	.65							2.50				.27	.34			.32	.06		.56		5.16
Powellton																																	
Raimelle ‖	Great Kanawha																																
Raleigh ‖	do				.05		.21			.20		.12	.58							.13	.93				.77	.11					.73		3.83
Renick ‖	do													.51							.84				.30				.48		1.30		3.43
Robertsburg ‖	do				.10	.05				.11		.07	.59							1.10	.43				.56	.10			.40		.66		4.18
Ryan	do					.28			.18		.03	.15	.50						T.	2.22				.55	.45	.01	T.	.26		.03	.53		5.19
Sissonville ‖	do																																
Spencer ‖	Little Kanawha																																
Sutton	Great Kanawha				.10	.10			.30				.50							.93				.41	.63			T.			.81		3.78
Union ‖	do					.20				.20			.50							T.	.60				.70	.20		.08			.55		3.03
White Sulphur Spgs.	do					.45				.25		.10	.50							1.15					.40						1.00		3.85
Williamson ‖	Big Sandy					.10			T.	.10		.18	.55							1.27	.50				.50	.10					.50	T.	3.80

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for October, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	58	65	69	59	52	48	65	50	48	48	55	38	44	64	67	68	64	72	59	46	48	49	44	36	34	53	56	58	73	64	34	54.5
	Minimum	34	28	34	35	32	31	22	26	31	20	23	29	26	25	50	51	34	51	34	26	17	26	28	30	30	18	36	38	36	24	19	30.5
Brandywine	Maximum	60	72	76	73	72	62	67	64	48	57	63	58	58	68	80	79	78	72	67	60	63	68	56	60	62	60	65	68	70	64	45	65.0
	Minimum	47	26	34	40	45	43	21	36	35	19	31	38	31	20	43	39	40	38	40	27	20	24	34	28	39	23	33	31	35	28	18	32.5
Burlington	Maximum																																
	Minimum																																
Martinsburg§	Maximum	60	66	72	72	67	55	63	64	52	56	60	54	58	65	79	70	63	72	72	50	54	58	59	45	50	61	65	59	61	43	42	60.2
	Minimum	51	37	39	40	49	45	31	32	41	27	28	42	35	29	30	47	41	42	52	35	27	28	32	36	33	29	35	41	37	39	26	36.6
Moorfield	Maximum	66	71	81	78	70			63	56	58	68	62	63	78	85	84	72	84	76	53	64	65	65	52	57	66	69	65	77	71	48	67.8
	Minimum	52	29	29	59	48			38	34	20	32	41	26	21	42	49	33	40	52	35	72	27	31	22	42	28	38	40	35	33	23	35.2
Piedmont	Maximum	58	66	73	70	67	56	65	55	54	52	62	52	54	66	75	74	64	79	70	45	53	58	53	48	44	60	63	62	71	67	42	60.6
	Minimum	49	32	39	54	48	44	29	39	35	25	40	35	34	26	37	46	35	37	42	34	23	31	34	32	33	28	41	38	34	29	26	35.8
Romney	Maximum	64	71	80	75	74	73	71	70	68	57	65	57	60	72	89	76	69	86	77	50	55	66	52	51	50	66	71	62	80	69	61	67.3
	Minimum	50	30	35	32	46	40	25	38	36	21	38	40	34	22	51	53	33	37	45	29	20	28	32	31	38	26	45	39	35	29	25	34.9
Upper Tract	Maximum	77	74	76	73	70	66	68	68	66	65	65	61	59	60	75			76	76	76	73	72	70	72	68	67	66	70	67		65	69.3
	Minimum	42	28	36	55	50	42	24	25	22	21	33	38	33	23	23			35	36	42	42	52	33	33	20	25	33	32	32		20	33.2
Northern Division.																																	
Bens Run	Maximum	61	72	74	70	68	57	69	58	59	58	54	48	53	71	75	74	81	79	71	50	59	57	57	43	43	65	58	60	81	62	46	62.4
	Minimum	44	34	46	55	50	38	32	33	33	37	36	37	36	32	54	49	42	53	37	34	32	35	33	32	37	28	36	32	38	29	28	37.8
Buckhannon	Maximum	58	65	71	68	60	53	63	53	51	56	55	49	58	65	70	71	77	78	70	44	56	53	59	36	42	43	55	64	76	65	39	58.8
	Minimum	42	31	39	58	51	42	28	42	38	27	43	39	38	26	38	51	41	49	40	34	25	36	34	30	33	25	35	36	37	37	27	37.2
Creston	Maximum	62	72	72	73	65	60	70	60	55	60	58	50	57	70	75	71	80	82	73	50	59	57	54	41	44	64	55	59	80	72	44	62.7
	Minimum	40	34	41	52	50	41	30	34	34	30	39	38	34	28	49	47	41	50	38	35	31	31	33	31	39	27	34	31	37	30	28	36.7
Elkins	Maximum	55	69	76	67	61	46	69	54	52	60	59	55	52	73	73	72	77	77	68	43	57	53	58	37	40	62	66	60	76	63	41	60.4
	Minimum	33	30	35	50	45	30	25	37	29	24	40	33	29	24	55	44	37	57	33	24	21	31	31	28	27	24	43	38	54	24	24	34.2
Fairmont§	Maximum	58	72	75	70	66	53	68	51	57	60	57	45	60	70	75	74	85	85	61	48	62	57	61	40	41	72	63	61	81	34	43	61.5
	Minimum	45	33	35	47	51	43	31	37	37	28	32	42	35	27	38	50	41	43	49	34	28	38	38	30	31	29	30	32	36	34	28	36.5
Glenville	Maximum	66	79	77	74	65	64	74	75	63	66	63	57	60	77	78	79	86	88	86	55	63	65	63	41	44	70	63	67	86	79	49	68.5
	Minimum	38	34	37	57	50	40	28	39	34	29	40	37	39	31	50	45	37	46	39	34	25	29	30	31	40	26	33	29	38	30	26	36.2
Grafton	Maximum	59	74	75	71	66	56	70	63	57	60	61	48	51	73	76	72	84	83	72	58	60	57	62	49	49	70	59	58	81	71	43	64.1
	Minimum	45	34	40	57	50	44	29	41	36	27	41	36	28	27	47	48	35	47	38	34	25	37	36	29	38	26	38	32	35	28	27	36.6
Lost Creek	Maximum	59	71	72	73	62	57	66	59	56	62	58	50	60	72	74	75	82	83	72	50	63	59	60	39	42	68	62	62	81	74	45	63.5
	Minimum	40	28	36	48	49	40	23	40	33	23	30	35	30	22	57	49	40	47	37	33	23	33	36	30	38	20	41	31	36	28	27	34.9
Mannington	Maximum	56	67	72	66	64	60	65	62	51	55	53	50	53	67	74	72	80	82	76	47	60	57	58	42	41	68	62	57	79	75	42	61.7
	Minimum	43	33	38	57	49	42	29	43	32	27	37	38	36	25	49	46	36	42	38	34	26	33	40	31	36	25	33	31	33	28	27	36.0
Morgantown	Maximum	57	70	75	68	66	58	66				57	57	49	52	69	73	70	79	83	72	54	58	56	62	46	41	68	63	56	79	74	40	62.7
	Minimum	44	32	59	54	54	40	31				44	36	33	30	56	50	39				37	42	29	35	33		34					40.6
New Cumberland	Maximum	56	70	69	67	68	53	60		58	51	56	48	49	66	71	72	67	80	67	46	57	54	49	44	42	66	60	57	76	62	65	60.2
	Minimum	43	32	49	51	46	39	28		27	28	30	35	35	25	52	42	32	45	36	31	26	30	39	32	36	31	35	31	29	26	25	34.9
New Martinsville	Maximum	67	73	73	70	68	65	67	65	62	61	58	56	55	71	75	75	78	83	80	50	60	58	53	42	42	67	58	60	80	67	46	64.0
	Minimum	42	37	38	58	53	42	32	45	34	32	38	38	36	28	49	50	43	49	45	36	30	33	35	31	37	30	35	32	37	28	28	38.1
Parkersburg	Maximum	59	68	71	69	67	55	67	55	54	56	53	50	54	69	75	71	81	81	71	48	57	55	52	44	44	65	52	56	80	51	43	60.4
	Minimum	42	35	48	58	48	39	34	42	35	37	38	37	36	32	58	52	47	61	35	34	33	36	33	32	38	32	39	33	46	29	30	39.6
Parsons	Maximum	57			74	66	45	49	55	58	58	55	52	72	73	74	81	79	69	49	60	61	36	39	68	68	58	60	80	69	41	60.9
	Minimum	43			32	28	33	37	35	23	37	33	33	21	39	43	43	32	39	30	25	19	29	32	21	39	33	29	29	25	25	31.7
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum	49	77	74	64	55	46	72	56	55	56	67	53	59	80	80	83	87	88	65	60	50	65	58	33	33	59	62	68	77	57	45	62.4
	Minimum	38	38	48	49	42	30	26	32	30	26	29	32	29	28	51	48	46	54	33	25	21	23	28	25	27	26	38	31	50	22	20	33.7
Terra Alta	Maximum	50	64	68	61	58	51	61	54	48	53	52	48	45	66	67	66	66	77	65	45	54	49	56	33	34	56	62	52	73	66	35	56.0
	Minimum	40	26	38	51	49	35	24	36	32	29	39	28	27	26	54	48	41	46	35	27	22	32	33	25	30	27	37	31	42	29	19	33.8
Wellsburg	Maximum																																
	Minimum																																
Weston	Maximum	60	71	74	69	72	70	66	64	55	59	58	52	55	71	76	77	82	82	74	48	60	56	59	39	42	68	62	60	80	75	43	63.8
	Minimum	45	33	42	58	52	50	29	44	37	28	41	37	31	27	55	50	42	50	40	34	28	37	37	31	38	26	49	33	38	29	28	38.7
Wheeling§	Maximum	59	74	75	71	73	52	68	50	55	58	59	45	51	70	76	75	75	82	57	50	62	60	51	40	41	68	53	60	80	35	44	60.3
	Minimum	45	37	36	54	55	41	35	35	32	31	35	35	36	31	31	47	40	40	50	33	30	32	32	32	33	30	30	31	30	30	27	36.0
Southern Division.																																	
Beckley	Maximum	75	78	77	79	80	69	72	71	72	72	70	68	77	80	78	80	80	81	80	78	77	70	71	70	68	73	72	74	75	68		74.5
	Minimum	31	49	50	40	49	28	37	28	29	28	38	30	28	45	40	41	46	50	50	48	30	25	26	26	30	35	34	38	40	25		36.5
Bluefield	Maximum	70	71	72	72	68	53	66	61	45	57	58	55	53	68	69	75	75	73	65	51	53	58	57	33	47	57	62	67	72	65	39	60.9
	Minimum	40	38	40	54	52	40	32	43	32	31	37	36	27	28	48	52	50	56	43	30	30	31	32	24	31	35	40	40	53	26	20	37.8
Charleston	Maximum	76	77	75	77	70	75	78	75	63	65	64	58	59	75	76	79	79	79	78	76	63	64	61	59	71	75	75	68	80	69	68	71.4
	Minimum	45	40	40	45	53	45	50	32	32	35	32	43	34	30	47	45	45	46	52	35	30	30	31	31	29	31	31	35	46	34	31	38.2
Elkhorn	Maximum	58	66	69	71	69	56	64	62	47	56	57	59	52	66	71	74	75	74	71	50	56	60	58	38	45	61	62	67	68	62	10	60.8
	Minimum	44	35	41	52	49	43	34	41	37	33	40	40	29	31	42	48	52	55	45	33	29	31	38	27	33	36	38	39	50	35	23	38.8
Green Sulphur Spgs.	Maximum																																
	Minimum																																
Hinton§	Maximum	60	67	74	74	68	52	66	56	48	57	57	53	56	68	78	80	75	77	65	50	55	57	59	40	43	63	59	63	76	35	46	60.5
	Minimum	46	35	42	44	50	45	33	33	36	31	32	40	30	32	34	39	48	51	53	33	28	29	32	29	29	28	29	36	37	34	21	36.1
Holcomb§	Maximum	59	74	75	72	58	54	68	50	55	61	60	46	48	75	68	76	76	76	78	65	64	60	58	57	50	43	62	60	68	76	52	61.7
	Minimum	35	29	35	43	44	37	27	33	36	26	33	40	31	25	33	40	41	48	58	30	27	23	30	29	27	28	37	32	36	40	24	34.1
Huntington§	Maximum	62	66	70	60	65	54	66	49	54	57	56	42	53	60	72	71	77	79	52	49	56	65	48	44	52	62	52	57	56	34	45	57.3
	Minimum	45	40	42	52	56	43	34	39	35	36	40	40	34	32	33	36	49	49	52	35	35	35	36	32	33	33	35	34	33	29	38.4
Lewisburg	Maximum	57	67	72	71	65	53	66	57	47	55	55	51	56	68	73	77	74	72	69	50	57	58	60	58	40	60	69	65	73	64	44	61.1
	Minimum	41	29	34	52	44	41	25	34	32	28	35	35	26	24	34	43	46	51	45	30	22	24	32	26	35	26	32	37	37	26	21	33.7
Marlinton	Maximum	52	62	68	66	58	48	56	50	48	52	50	46	42	66	70	70	68	66	62	40	50	50	52	38	40	56	54	56	66	56	38	54.7
	Minimum	40	28	32	50	46	32	22	32	28	24	36	32	30	20	32	38	38	44	40	30	18	22	28	26	30	22	32	32	28	24	16	30.7
Point Pleasant	Maximum	68	74	74	75	68	61	68	62	59	61	56	53	58	73	78	76	85	84	70	52	59	60	55	42	50	64	59	60	82	68	48	64.5
	Minimum	37	34	45	55	52	37	29	42	28	31	36	35	31	27	52	49	41	52	36	28	28	28	34	29	38	26	26	29	37	28	26	35.7
Powellton	Maximum																																
	Minimum																																
Robertsburg§	Maximum	64	75	75	74	64	60	72	60	60	63	62	45	59	73	75	76	85	85	55	55	64	63	49	45	53	69	55	65	82	34	49	63.2
	Minimum	37	34	40	52	54	42	31	36	31	31	40	41	40	29	33	50	45	49	53	35	31	31	31	31	34	28	31	30	31	33	28	36.9
Ryan	Maximum	68	74	75	80	74	61	73	60	60	62	59	48	44	66	80	79	82	85	75	74	60	61	44	32	34	67	66	67	83	68	66	65.4
	Minimum	31	29	32	49	55	34	26	38	29	27	41	36	29	24	46	45	49	48	48	32	26	28	32	31	32	24	34	38	48	29	24	35.3
Sutton	Maximum	58	58	72	72	68	56	56	52	53	60	60	58	57	72	84	84	80	80	77	54	54	55	55	46	48	62	62	58	63	63	42	61.9
	Minimum	42	30	39	46	41	41	41	41	38	32	42	30	34	30	46	46	44	50	45	34	32	31	30	31	32	33	40	38	41	30	30	37.6
Union§	Maximum	68	69	70	74	76	48	69	68	45	60	59	45	69	70	78	79	78	73	78	58	56	62	64	37	58	66	70	74	62	30		63.8
	Minimum	38	38	42	48	50	39	27	35	32	23	28	42	30	30	29	41	43	42	63	31	26	23	39	24	26	26	33	52	40	27	21	34.5
White Sulphur Spgs.	Maximum	70	72	75	74	69	57	68	56	50	55	60	56	54	62	70	77	79	81	71	53	58	56	68	65	67	71	73	70	74	61	45	65.1
	Minimum	40	32	35	48	42	37	24	33	33	27	37	39	28	22	30	37	39	41	37	29	19	20	39	37	39	47	45	39	38	29	19	34.3
Williamson§	Maximum	63	70	74	74	63	57	70	51	57	60	60	49	56	72	71	78	84	81	57	54	60	62	50	40	53	67	63	67	81	47	48	62.5
	Minimum	44	45	46	48	56	43	36	36	40	37	40	40	32	35	35	45	52	53	54	36	32	33	35	30	30	32	32	34	40	33	25	38.9

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
NO RAIN
NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
Statute Miles
Kilometers

51.05
NWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

NOVEMBER, 1917

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
DECEMBER 24, 1917

Departure of the Mean Temperature from the Normal, November, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXV. PARKERSBURG, W. VA., NOVEMBER, 1917. No. 11.

GENERAL SUMMARY.

The past month was exceptionally cold and dry, the average temperature, 39.6°, being the lowest of record for November, except in 1901, 1903, and 1910, and the average precipitation, 0.89 inch, was also the lowest for November, except in 1904. Excepting three or four short periods, the month was continuously cold, while in many sections measurable amounts of precipitation were not received until the 21st, making one of the longest dry periods of record for the State. The germination and growth of winter grains were retarded by the cold and dry weather, and many fields were not seeded until during the last decade, owing to a wet October, the lateness of the corn crop, and the scarcity of farm labor.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins were 30.21 and 30.20 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.75 inches on the 26th, and 29.32 inches on the 22d. Elkins, 30.70 inches on the 26th, and 29.34 inches on the 22d.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 39.6°. The departure from the normal for 42 stations having ten or more years of record was —3.4°. The month opened abnormally cool and exceptionally low temperatures for the season also occurred from the 23d to the 28th. A reading of zero was noted at Parsons on the 25th. The temperatures were generally somewhat above the normal on the 11-13th, 17-18th, 21st-22d, and 30th, with the highest readings in most sections on the 6th and 12th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 88 per cent; 8 p. m., 76 per cent. The November averages for the same hours for the past 29 years are 81 and 72 per cent, respectively. Elkins, 8 a. m., 91 per cent; 8 p. m., 78 per cent. The November averages for Elkins for the same hours for the past 17 years are 84 and 73 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 65 stations reporting, was 0.89 inch. The departure from the normal for 46 stations having ten or more years of record was —1.70 inches. While there were scattered light rains or snows on several days during the second decade, no precipitation of consequence was received until the 22d and the amounts were light until the 27-28th, when the greater portion of the precipitation for the month was received. In most localities the snowfall was unimportant.

WIND.

The average wind velocity at Parkersburg was 3.3 miles per hour, or 2.8 miles below the November average for the past 27 years. The average at Elkins was 2.8 miles per hour, or 1.6 miles below the November average for 18 years. The highest velocity at Parkersburg was 24 miles per hour from the southwest on the 25th, and at Elkins 13 miles per hour from the west on the 18th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 45 per cent of the possible amount, or 9 per cent above the November average for 20 years. The average at Elkins was 55 per cent, or 17 per cent above the November average for 18 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 8th and 14th; Bayard, 13th and 28th; Buckhannon, 13th and 14th; Burlington, 30th; Charleston, 8th; Davis, 16th and 29th; Elkins, 2d, 5th, 6th, 7th, 11th, 12th, 14th, 15th, and 28th; Evans, 13th, 14th, and 15th; Fairmont, 2d, 4th, 8th, 12th, and 14th; Glenville, 14th, 15th, and 30th; Grafton, 4th, 11th, 12th, 13th, 14th, and 15th; Hinton, 11th, 15th, and 29th; Huntington, 8th, 11th, and 17th; Lost Creek, 29th; Mannington, 12th, 13th, and 14th; Marlinton, 11th; Morgantown, 7th, 8th, and 13th; New Cumberland, 4th, 5th, 6th, 7th, 8th, 10th, 11th, 12th, 13th, and 15th; Parkersburg, 12th and 14th; Pickens, 23d and 28th; Robertsburg, 5th, 8th, and 12th; Rowlesburg, 2d, 4th, 5th, 8th, 11th, 12th, 13th, 14th, 15th, and 18th; Smithfield, 30th; St. Marys, 2d, 12th, 15th, and 16th; Wheeling, 1st, 2d, 3d, 4th, 5th, 6th, 8th, 9th, 10th, 11th, 12th, 14th, 17th, and 18th.

Halo, lunar: Parkersburg, 26th.

Haze, light: Bayard, 7th, 8th, 9th, 10th, 11th, and 12th; Lost Creek, 4th, 5th, 6th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, and 17th; Morgantown, 11th, 12th, 13th, and 14th; Parkersburg, 11th.

Sleet: Bayard, 16th and 29th; Burlington, 29th; Brandywine, 27th; Clay, 28th; Davis, 16th; Holcomb, 22d; Marlinton, 22d, 27th, and 28th; Pickens, 16th and 22d; Smithfield, 27th; Terra Alta, 16th and 23d.

Smoke, light: Creston, 4th, 5th, 6th, 8th, 10th, 11th, 12th, 13th, and 14th; Holcomb, 10th, 11th, and 12th; Mannington, 11th; Parkersburg, 10th; Pickens, 12th and 13th.

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy	Cloudy.
1891	42.5	80	8	3.04	....	...	...	..	..	..
1892	41.7	81	3	3.10	....	....	....	..	..	..
1893	41.4	74	3	2.12	3.22	0.47	....	13	6	11
1894	39.8	82	5	2.11	3.47	0.25	....	12	6	12
1895	44.6	87	12	2.35	4.00	0.20	....	12	8	10
1896	48.1	80	10	3.50	5.07	1.56	....	10	8	12
1897	45.0	76	13	4.45	7.15	0.30	....	9	9	12
1898	41.4	75	— 3	2.84	4.74	1.00	....	9	11	10
1899	45.6	76	14	1.93	3.49	0.20	T.	11	9	10
1900	45.5	86	9	5.20	8.88	2.71	2.8	8	8	14
1901	38.0	79	7	2.51	5.35	1.23	4.3	8	6	16
1902	50.3	83	12	3.27	4.56	1.23	0.7	11	6	13
1903	38.9	80	— 4	2.46	4.98	0.67	4.6	11	8	11
1904	49.2	75	9	0.64	3.05	0.07	1.4	12	7	11
1905	41.8	74	10	2.44	5.67	0.67	T.	13	7	10
1906	44.2	84	13	2.39	5.50	0.55	2.2	15	5	10
1907	41.8	74	13	3.40	7.05	1.41	1.0	10	8	12
1908	43.3	81	0	1.14	2.73	0.48	5.2	15	8	7
1909	49.1	84	12	1.34	3.85	0.23	0.2	14	7	9
1910	37.3	75	5	1.95	4.41	0.66	1.8	8	7	15
1911	40.5	83	7	2.74	5.54	1.27	2.0	10	7	13
1912	42.8	78	2	1.69	4.08	0.40	0.9	14	7	9
1913	44.5	82	— 1	4.49	7.50	0.61	13.4	12	5	13
1914	42.6	84	2	1.32	2.27	0.50	2.9	16	6	8
1915	45.2	85	11	3.06	5.99	1.15	1.1	13	8	9
1916	43.8	81	8	1.77	3.07	0.75	0.3	16	5	9
1917	39.6	78	0	0.89	3.65	0.05	1.5	16	4	10
Means and extremes	42.9	87	— 4	2.52	8.88	0.05	2.4	12	7	11

Climatological Data for November, 1917.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	34.3	−4.2	59	12	8	25†	35	0.64	−2.00	0.18	3.5	11	12	6	12	w.	G. C. Dixon.
Brandywine	Pendleton		0	38.9	.....	68	12†	11	25	46	0.29	.....	0.17	.....	3	22	1	7	n.	Elmer Keister.
Burlington	Mineral	875	22	38.8	−3.5	67	18	13	27	42	0.30	−1.44	0.20	2.0	3	9	14	7	....	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27	.....	.....	.....	.....	.....	.....	.....	0.20	−2.04	0.20	1.8	1	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	24	40.4	−2.5	69	10	18	27	42	0.70	−1.43	0.30	1.5	5	19	3	8	n.	G. W. Van Metre, C. E.
Moorefield [a]	Hardy	900	20	41.4	−2.1	73	12	15	27	48	0.22	−1.40	0.22	T.	1	23	0	6	.....	M. S. Henkel.
Piedmont	Mineral	919	4	40.4	.....	68	12	15	27	37	0.25	.....	0.18	1.8	4	16	7	7	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	19	41.8[f]	−0.8	71[f]	11†	13	27	47[f]	0.55	−1.41	0.16	1.0	5	10	12	8	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	42.6[g]	−2.1	68[g]	13	15[b]	27	43[g]	0.05	−1.59	0.05	.....	1	29[a]	2[a]	7[a]	w.	J. M. Mallow.
Averages and	extremes	.....	....	39.8	−2.5	73	12	8	25†	48	0.36	−1.62	0.30	1.7	4	16	6	8	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	40.6	−2.6	67	6	14	24	43	0.78	−1.79	0.37	4.0	5	21	3	6	.....	J. D. Riggs.
Brandonville ††	Preston	1,809	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. T. Miller.
Buckhannon	Upshur	1,411	20	37.8	−3.7	63	13	3	25	35	1.07	−2.30	0.70	2.0	3	18	3	9	.....	H. A. Darnall.
Central Station	Doddridge	950	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. H. Doak.
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	0.79	.....	0.40	1.0	2	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	15	40.9	−3.7	66	6	12	25	41	0.72	−1.73	0.40	1.0	5	14	2	14	w.	J. M. Reed.
Davis	Tucker	3,093	8	.....	.....	.....	.....	.....	.....	.....	1.34	.....	0.60	4.0	6	17	0	13	sw.	Ross C. Male.
Elizabeth	Wirt	646	5	.....	.....	.....	.....	.....	.....	.....	0.60	.....	0.31	.....	4	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,940	16	37.0	−2.6	64	12	32	26	41	1.23	−1.63	0.56	3.2	11	14	5	11	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	39.0	−3.8	69	12	10	25	43	0.60	−2.10	0.29	2.0	8	20	2	8	w.	F. P. Hall.
Glenville	Gilmer	738	23	40.5	−3.0	70	6	7	25	49	0.92	−2.07	0.45	1.0	7	13	7	10	w.	Howard R. Brannon.
Grafton	Taylor	1,000	24	39.2	−3.9	67	13	9	25	42	0.60	−2.49	0.37	1.0	3	11	10	9	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	38.9	−3.3	66	6	8	25	49	0.62	−1.84	0.50	1.5	5	18	4	8	w.	Allen Smith.
Mannington	Marion	974	14	38.7	−2.4	67	6	4	25	44	0.61	−1.82	0.24	2.5	8	14	5	11	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	40.6[a]	−2.8	65[a]	6	12[a]	25	40[a]	0.64	−2.25	0.50	0.8	5	14	3	13	sw.	R. W. Muldoon.
Moundsville	Marshall	642	14	38.2[a]	−5.9	66[a]	5	10	25	44[a]	0.24	−1.46	0.24	2.4	1	12	4	14	sw.	M. Z. White.
New Cumberland	Hancock	987	19	37.4	−3.9	70	6†	15	8†	47	0.20	−1.61	0.05	1.0	6	13	8	9	nw.	M. F. Smith.
New Martinsville	Wetzel	634	23	39.6	−5.0	67	6	10	25	40	0.85	−1.76	0.40	T.	5	18	1	11	n.	Wm. Ankrom.
Parkersburg	Wood	638	30	40.6	−2.5	67	6	20	25	36	0.60	−2.23	0.42	2.3	6	12	6	12	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	36.6	−4.6	67	12	0	25	46	0.87	−1.65	0.67	2.0	2	13	6	11	.....	J. W. Swisher.
Philippi	Barbour	1,149	20	39.4	−3.8	66	12	8	25	38	0.90	−1.94	0.45	2.0	5	17	8	5	w.	Okey J. Robinson.
Pickens [a]	Randolph	2,697	14	38.2	−2.4	68	5	4	25	41	3.65	−0.16	1.50	7.0	8	15	3	11	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30	.....	.....	.....	.....	.....	.....	.....	1.29	−1.73	0.64	.....	10	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	8	.....	.....	.....	.....	.....	.....	.....	0.63	.....	0.50	1.8	4	.....	.....	.....	nw.	Wm. Hughes.
Smithfield	Wetzel	835	11	37.5	−3.5	69	12	3	25	46	1.05	−1.74	0.62	4.0	6	23	1	6	se.	G. M. Whister.
Terra Alta	Preston	2,612	16	35.6	−6.5	61	12	8	27	37	0.70	−2.86	0.20	5.0	6	16	7	7	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Waugh.
Weston	Lewis	1,026	21	41.0	−2.3	67	12	10	25	40	0.70	−2.60	0.45	.....	4	11	10	9	....	Weston State Hospital.
Wheeling	Ohio	645	30	38.3	.....	70	6†	12	25	47	0.38	−2.07	0.13	1.3	5	12	6	12	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	38.8	−3.6	70	6†	0	25	49	0.87	−1.90	1.50	2.3	5	15	5	10	w.	
Southern Division.																				
Bancroft	Putnam	574	12	41.2	−3.8	65	10†	15	25	42	0.91	−1.61	0.63	0.5	3	20	0	10	ne.	R. E. Dent.
Beckley	Raleigh	2,440	16	.....	.....	.....	.....	11	25	....	3.10	+0.61	1.13	.....	3	15	7	8	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	42.0	−2.5	67	6	15	25	37	0.76	−1.69	0.38	.....	5	17	4	9	.....	Norfolk & Western Ry
Camden-on-Gauley	Webster	2,062	1	.....	.....	.....	.....	.....	.....	.....	2.40	.....	1.50	2.0	5	18	3	9	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	13	45.0	−3.1	69	10	22	25	42	1.65	−1.26	0.63	T.	7	8	0	22	w.	C. V. Lewis.
Clay	Clay	706	0	.....	.....	.....	.....	.....	.....	.....	0.38	.....	0.38	.....	1	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba	Jackson	650	14	40.4	−3.2	70	6	10	25	44	0.52	−1.75	0.40	T.	3	13	6	11	nw.	Frank Allen.
Dam 19 O. R.	Wood	557	0	.....	.....	.....	.....	.....	.....	.....	0.68	.....	0.46	0.2	5	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	0	.....	.....	.....	.....	.....	.....	.....	0.45	.....	0.30	.....	4	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	1	.....	.....	.....	.....	.....	.....	.....	0.50	.....	0.30	.....	4	.....	.....	.....	.....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0	.....	.....	.....	.....	.....	.....	.....	0.78	.....	0.45	T.	3	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	23	42.4	−3.4	63	7	15	25	33	1.85	−0.73	0.53	0.9	8	21	0	9	w.	J. J. Lincoln.
Evans	Jackson	606	4	42.0	.....	70	6	19	25	40	0.84	.....	0.27	1.0	6	15	0	15	.....	B. F. Sayre.
Gary	McDowell	1,426	0	.....	.....	.....	.....	.....	.....	.....	1.17	.....	0.25	0.4	9	.....	.....	.....	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Hinton	do	1,450	19	40.6	−3.8	68	4	18	25	43	0.72	−1.43	0.22	T.	6	14	1	15	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	24	38.8	.....	68	11	7	26	44	1.96	.....	0.58	3.0	7	14	4	12	.....	R. C. Ferguson.
Huntington	Cabell	538	22	40.0	−3.7	66	6	22	24	36	1.20	−1.50	0.58	T.	4	14	2	14	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	0	.....	.....	.....	.....	.....	.....	.....	1.16	.....	0.43	2.0	7	.....	.....	.....	.....	Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	16	39.1	−2.3	64	7	16	21	43	0.75	−1.52	0.46	T.	4	14	5	11	nw.	Geo. T. Argabate.
Logan	Logan	687	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	33.6	−4.7	60	12	10	27	42	0.94	−1.80	0.48	T.	7	14	6	10	nw.	S. L. Brown.
Nuttallburg [g]	Fayette	2,252	23	39.4	−4.7	57	9	10	26	26	0.61	−1.83	0.30	.....	3	15	3	5	.....	Miss Donna Tully.
Point Pleasant	Mason	553	23	40.8	−4.4	71	6	16	25	45	0.69	−2.11	0.48	T.	3	14	4	12	nw.	W. D. Holmes.
Powellton	Fayette	933	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. C. Lampert.
Rainelle	Kanawha	2,425	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. N. Bobbitt.
Raleigh	Raleigh	2,130	0	.....	.....	.....	.....	.....	.....	.....	1.36	.....	0.58	1.5	8	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	0	.....	.....	.....	.....	.....	.....	.....	0.38	.....	0.20	1.0	3	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg [b]	Putnam	574	16	39.3	−4.1	70	6	16	25	45	1.16	−2.45	0.56	2.0	6	9	4	15	.....	L. C. Brace, Jr.
Ryan	Roane	709	13	38.8	−4.6	70	11	10	25	46	1.25	−1.24	0.59	1.0	7	15	7	8	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	0	.....	.....	.....	.....	.....	.....	.....	0.93	.....	0.48	.....	2	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. M. McKown.
Sutton	Braxton	839	10	40.4	−3.8	60	20†	11	25	46	1.37	−1.33	0.87	1.0	6	23	5	2	.....	C. B. Eakle.
Union	Monroe	2,250	12	40.7[r]	+0.4	78[r]	10	15	25	55[a]	0.40	−1.62	.....	T.	3	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier ††	1,940	6	40.5	.....	68	7†	14	26	50	0.30	.....	0.10	T.	3	21	3	6	.....	J. M. Ayres.
Williamson	Mingo	660	16	42.8	−2.5	67	6	20	25	36	1.00	−1.67	0.43	T.	7	19	2	9	w.	J. F. Keyser.
Averages and	extremes	.....	....	40.4	−3.4	78	10	7	26	55	1.06	−1.46	1.50	0.7	5	16	3	11	w.	
State averages and	extremes	.....	....	39.6	−3.4	78	10	0	25	55	0.89	−1.70	1.50	1.5	5	16	4	10	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

r Approximated by the observer.

Daily Precipitation for November, 1917.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																															
Bayard	Potomac																.02					.06	.15	.01	.03	.01	.02	.07	.03	.18	.06	0.64
Brandywine	do																					.10						.02	T.	.17		0.29
Burlington	do																					T.			T.			.20		*	.10	0.30
Harpers Ferry	do																												.20			0.20
Martinsburg	do																				.05	.08	.12					.15			.30	0.70
Moorefield	do																												T.	T.	.22	0.22
Piedmont	do															T.					T.	T	.02						.18	.04	.01	0.25
Romney	do																					.15	.10						.10	.16	.04	0.55
Upper Tract	do																											T.			.05	0.05
Northern Division.																															
Bens Run	Ohio																						.04	.08		.14		.37		.15		0.78
Brandonville	Monongahela																															
Buckhannon	do																T.					T.	T.	T.	.20			T.	.70	.17	T.	1.07
Central Station	Middle Is. Creek																															
Cortland	Monongahela																										.40			.39		0.79
Creston	Little Kanawha																T.					T.	T.	.02	.10	T.			.40	.05	.15	0.72
Davis	Monongahela																	T.		T.		T.	T.	T.	.10	.15	.10	T.	.05	.60	.34	1.34
Elizabeth	Little Kanawha																								.14				.31	.09	.06	0.60
Elkins***	Monongahela	T.														T.	.02				.06	.01	.20	.04	.04	T.	.01	.29	.27	.14	.15	1.23
Fairmont	do													T.			T.					.01	.02	.05	.12	.01	T.		.29	.04	.06	0.60
Glenville	Little Kanawha																.12					.05	.03	T	.10				.45	.12	.05	0.92
Grafton	Monongahela																						T.	T.	.23			*	.37	T.	T.	0.60
Lost Creek	do																T.				T		T.	T.	.04			.08	.42	.05	.03	0.62
Mannington	do																.03					T	.05	.09	.10			.08	.16	.07	.03	0.61
Morgantown	do																T.					T.	.02	.04	.05	T		.50		.03	T.	0.64
Moundsville	Ohio																						T.	T.	T.	T.			.24			0.24
New Cumberland	do	.03														T.						T.	.05	.02				.05	.02		.03	0.20
New Martinsville	do																							.20	T.			.10	.40	.10	.05	0.85
Parkersburg ***	Ohio															T.			T.		T.	T	T.	.03	.01			.40	.02	.11	.03	0.60
Parsons	Monongahela																						T.	T.	.20				T.	T.	.67	0.87
Philippi	do																							.10				.20	.45	.05	.10	0.90
Pickens	do	.63																				.10	.17	.08	.40			.65	1.50		.12	3.65
Rowlesburg	do																.05					.07	.05	.08	.12	.05	.06		.64	.12	.05	1.29
Saint Marys	Ohio					T							T.										T.		.04				.50	.04	.05	0.63
Smithfield	Fishing Creek																	.06							.20	.02			.62	.05	.10	1.05
Terra Alta	Monongahela																T.					.10		.05	.20			.10	.20		.05	1.70
Wellsburg	Ohio																															
Weston	Monongahela																					.05			.10				.45	.10		0.70
Wheeling	Ohio		T.														T.	T.					.01	.12	.11	T.	.01		.13		T.	0.38
Southern Division.																																
Bancroft	Great Kanawha																							T.	.05				.63	.23		0.91
Beckley	do																			1.13				1.00						.97		3.10
Bluefield	do													.22	.10								.05		.01				.38			0.76
Camden-on-Gauley	do																						.34	T.	.20		T.	T.	1.50	.25	.11	2.40
Charleston	do																.10	T.				T.	.10	.15	.12				.63	.40	.15	1.65
Clay	do																					T.							.38			0.38
Cuba	Sand Creek																T.		T.			T.	T.	T.	T.			.26	.14	.12	T.	0.52
Dam 19 O. R.	Ohio																						.01	T.	.02	T.	T.	T.	.46	.12	.07	0.68
Dam 20 O. R.	do																							.05	T	T.			.30	.05	.05	0.45
Dam 22 O. R.	do																.03	T.						T.	.06	T.			.30	.11	T.	0.50
Dam 26 O. R.	do																T.							T.	T.			T.	.45	.20	.13	0.78
Elkhorn	Big Sandy													.37	.25		.09							.29	.09				.21	.53	.02	1.85
Evans	Ohio																T.						T.	.20	.02			.20	.27	.12	.03	0.84
Gary	Big Sandy												.07	.10							.01		.18	.04				.25	.23	.06	.23	1.17
Green Sulphur Spgs.	Great Kanawha																															
Hinton	do														.04							.02		.06	T.	T.			.18	.20	.22	0.72
Holcomb	do																T.				T.		T.	*	*	.38		*	*	1.00	.58	1.96
Huntington	Ohio														.16					T.		T.		T.	T.	T.		T.	.58	.28	.18	1.20
Kaylord	Great Kanawha																T.						.05	.07	.12	.05			.43	.35	.09	1.16
Lewisburg	do																					.04	.09		T.				.46	.16		0.75
Logan	Guyandotte																															
Madison	Great Kanawha																															
Marlinton	do																					.04	.08	T.	T.	T.	.04	.04	.48	.16	.10	0.94
Nuttallburg	do																							T.		.11				.20	.30	0.61
Point Pleasant	Ohio																							.05				T.	.18	T.	.16	0.69
Powellton																																
Rainelle	Great Kanawha																															
Raleigh	do													.05	.04							T.	.07	.04	.15	T.			.58	.10	.33	1.36
Renick	do																					.08		.10							.20	0.38
Robertsburg	do														.04	T.									.10	.10		T.	.56	.21	.15	1.16
Ryan	do																.01				T.			.01	.04	.05			.40	.59	.15	1.25
Sissonville	do																												.45	.48	T.	0.93
Spencer	Little Kanawha																															
Sutton	Great Kanawha																						.16	T.	.10			.13	.87	.06	.05	1.37
Union	do																						T.	T.	T.				*	*	.40	0.40
White Sulphur Spgs.	do																				.10	.10	T.	T.					.10			0.30
Williamson	Big Sandy													T.	.03								.02	.03	.05				.43	.40	.04	1.00

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

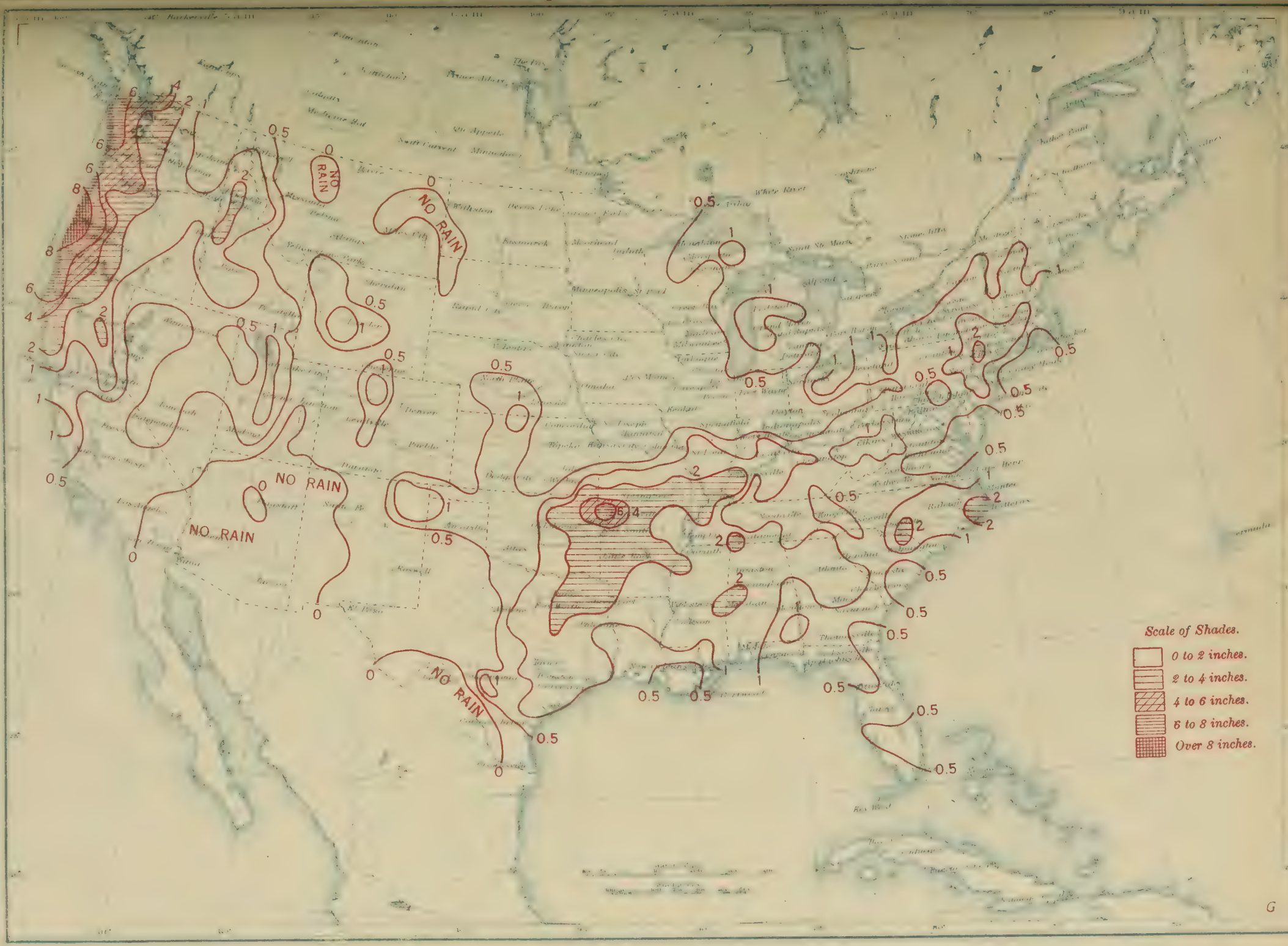
T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for November, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	32	34	44	55	53	57	58	56	52	53	55	59	53	52	44	41	43	53	49	48	38	39	36	26	22	21	30	36	34	44	....	43.9
	Minimum	19	15	25	24	20	32	23	27	32	30	28	35	33	25	32	31	30	30	22	23	32	30	25	15	8	12	8	22	22	30	....	24.7
Brandywine	Maximum	50	44	52	55	62	66	63	60	65	67	66	68	63	50	60	53	54	68	60	61	56	56	46	34	33	30	34	50	45	48	....	54.0
	Minimum	25	15	19	20	16	21	30	17	19	22	26	27	29	35	22	37	20	30	32	19	31	30	32	22	11	26	12	13	22	35	....	23.8
Burlington	Maximum	42	46	50	53	59	65	59	59	62	66	62	65	46	51	58	58	59	67	49	58	55	57	46	35	34	34	27	43	40	39	....	51.5
	Minimum	29	15	26	29	17	24	31	20	31	29	29	30	31	23	23	25	33	28	28	25	27	32	34	25	24	20	13	23	24	33	....	26.0
Martinsburg§	Maximum	47	46	55	51	54	67	56	58	65	69	60	60	43	53	62	51	60	68	46	55	50	47	43	35	37	36	31	41	34	45	....	50.8
	Minimum	26	26	27	34	23	25	29	30	31	34	36	35	32	32	29	30	36	35	35	30	32	42	35	31	25	25	18	19	26	28	....	29.9
Moorfield	Maximum	....	52	59	58	64	70	60	63	67	70	65	73	61	52	66	54	65	72	63	65	58	59	51	38	39	38	30	47	45	45	....	56.9
	Minimum	....	19	20	24	18	22	34	20	20	24	25	29	30	28	22	40	23	24	28	22	37	40	36	27	19	29	15	25	21	33	....	26.0
Piedmont	Maximum	42	44	51	54	52	65	58	62	63	66	64	68	49	52	55	44	58	61	52	58	55	52	44	34	31	31	27	44	39	37	....	50.4
	Minimum	30	31	23	26	22	29	37	25	30	40	34	35	36	29	30	38	40	38	33	29	39	37	32	25	19	25	15	24	27	33	....	30.4
Romney	Maximum	55	47	56	57	60	69	61	63	66	69	71	69	57	....	....	....	....	....	....	71	60	61	49	48	36	46	39	46	56	55	....	57.0
	Minimum	25	18	21	24	17	25	31	20	25	32	30	32	32	26	25	38	30	29	27	24	35	38	35	25	20	29	13	24	25	27	....	26.7
Upper Tract	Maximum	43	60	....	58	60	65	63	63	63	64	64	65	68	....	64	62	60	66	64	61	61	60	56	55	....	....	....	....	....	40	....	60.2
	Minimum	27	17	....	22	20	25	20	21	22	28	29	30	30	....	32	26	34	27	30	21	23	24	30	34	19	26	15	16	23	31	....	25.1
Northern Division.																																	
Bens Run	Maximum	41	46	52	58	62	67	59	60	63	63	63	50	60	64	48	44	57	61	50	57	57	55	37	32	37	35	38	40	45	48	....	51.6
	Minimum	32	24	25	28	26	24	33	26	24	29	31	36	35	35	28	37	28	30	26	29	43	36	26	14	29	22	22	37	37	39	....	29.7
Buckhannon	Maximum	40	45	42	54	56	60	52	53	55	60	62	60	63	51	50	45	53	60	57	55	52	52	36	30	30	30	35	41	48	56	....	49.1
	Minimum	21	20	21	24	21	25	32	21	20	25	28	28	30	27	28	35	38	28	28	23	40	36	30	20	3	20	16	31	34	41	....	26.5
Creston	Maximum	43	45	51	58	0	66	56	56	59	63	63	63	54	52	51	45	57	62	59	62	56	55	42	33	34	33	34	42	47	49	....	51.7
	Minimum	28	23	22	25	24	26	30	25	22	27	29	33	36	33	41	30	26	29	25	21	39	40	33	22	12	21	21	32	37	36	....	28.3
Elkins	Maximum	37	41	46	57	60	61	56	56	58	62	63	64	61	56	52	38	55	62	47	58	53	49	35	26	27	27	40	40	43	47	....	49.2
	Minimum	24	18	20	24	19	22	26	18	18	22	28	28	30	30	25	33	30	25	25	20	39	35	25	18	14	12	12	34	31	38	....	24.8
Fairmont§	Maximum	40	48	51	59	60	66	58	52	62	65	66	69	55	51	53	42	58	62	48	60	54	54	33	28	31	35	39	41	44	47	....	51.0
	Minimum	29	21	22	27	21	23	28	24	21	22	27	32	34	31	29	36	37	31	25	26	31	41	32	24	10	18	20	24	31	34	....	27.0
Glenville	Maximum	47	53	55	65	65	70	61	64	67	69	67	68	61	59	57	50	62	61	63	64	58	56	46	32	34	36	33	43	49	50	....	55.5
	Minimum	26	12	18	20	18	22	26	19	18	23	28	30	35	32	29	37	28	25	24	18	36	45	31	22	7	18	17	32	36	34	....	25.5
Grafton	Maximum	41	45	50	56	59	64	56	55	60	63	65	66	67	50	52	41	57	62	60	58	52	54	42	34	32	32	35	42	47	48	....	51.5
	Minimum	28	20	20	25	20	29	31	22	18	23	29	30	35	29	28	35	38	30	22	24	40	39	32	22	9	15	18	33	30	37	....	27.0
Lost Creek	Maximum	40	48	57	59	62	66	59	57	64	64	65	64	54	52	54	45	59	65	59	61	54	52	46	31	32	33	34	43	46	46	....	52.4
	Minimum	24	15	18	19	16	21	29	18	15	22	25	30	38	29	30	31	40	22	20	20	42	42	30	22	8	21	15	33	30	36	....	25.4
Mannington	Maximum	38	43	52	58	60	67	55	59	61	66	63	66	54	58	51	43	59	61	59	59	52	54	51	31	31	33	33	40	44	47	....	51.6
	Minimum	26	17	19	22	18	23	30	19	19	23	26	32	34	27	24	36	33	27	21	24	42	36	31	24	4	22	17	33	29	35	....	25.8
Morgantown	Maximum	36	43	50	54	59	65	56	51	59	64	64	63	56	48	52	41	55	60	58	58	52	54	43	30	30	....	33	39	45	48	....	50.6
	Minimum	33	33	25	24	19	30	36	20	20	34	35	38	42	25	37	34	37	41	27	30	42	42	29	22	12	....	17	32	29	40	....	30.5
New Cumberland	Maximum	39	42	54	48	61	70	70	51	63	67	61	53	51	63	49	46	57	53	46	46	45	49	34	29	31	36	29	36	42	45	....	48.9
	Minimum	26	20	23	22	18	26	26	15	16	24	28	32	34	24	26	35	29	40	28	30	37	34	26	21	15	21	17	29	24	32	....	26.0
New Martinsville	Maximum	40	43	54	57	62	67	56	56	60	65	62	63	54	48	48	45	57	60	56	57	55	53	45	33	30	35	37	38	42	43	....	50.7
	Minimum	28	22	23	27	26	27	36	23	22	27	30	36	38	30	26	37	28	31	23	26	43	40	30	22	10	20	20	30	32	38	....	28.4
Parkersburg	Maximum	40	44	53	56	60	67	54	57	61	61	61	62	45	56	47	44	60	65	46	55	56	54	35	28	35	32	41	41	47	50	....	50.4
	Minimum	32	26	27	29	27	31	36	31	26	32	32	36	38	29	29	34	31	35	28	24	44	35	26	22	20	22	27	38	36	44	....	30.9
Parsons	Maximum	40	44	50	61	62	65	58	61	60	63	64	67	62	57	54	39	56	64	55	60	52	50	42	29	27	28	30	38	41	49	....	50.9
	Minimum	25	18	16	21	16	20	28	16	16	19	26	27	26	26	21	33	30	22	24	20	35	31	29	19	0	16	9	19	30	32	....	22.3
Philippi	Maximum	42	44	49	57	59	64	56	60	58	62	60	66	54	52	52	54	60	58	63	60	53	54	40	38	35	31	35	41	40	39	....	51.2
	Minimum	26	19	24	24	23	31	21	24	27	33	30	34	26	29	32	33	36	30	25	27	40	38	29	24	8	21	18	35	36	30	....	27.6
Pickens	Maximum	45	47	54	55	68	67	61	63	65	65	64	65	59	59	....	37	63	64	55	53	51	48	37	23	24	24	35	37	45	47	....	51.0
	Minimum	22	18	20	25	27	28	29	23	25	29	32	35	39	25	....	30	32	31	26	23	34	35	23	14	4	9	8	21	31	39	....	25.4
Terra Alta	Maximum	32	35	38	57	57	58	53	54	55	60	60	61	53	59	46	35	45	57	51	53	47	48	38	25	23	24	29	36	36	43	....	45.6
	Minimum	21	16	24	21	20	28	30	19	24	34	31	31	32	25	30	29	32	36	22	29	34	36	24	15	9	18	8	28	25	32	....	25.5
Wellsburg	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Weston	Maximum	39	46	49	59	62	65	57	60	61	62	65	67	55	55	55	44	57	63	60	60	53	55	48	32	33	32	36	43	45	48	....	52.2
	Minimum	28	22	23	24	22	27	32	24	40	28	28	32	39	33	33	36	34	31	27	23	42	46	31	22	10	25	20	35	34	39	....	29.7
Wheeling§	Maximum	40	49	55	60	50	70	58	58	64	70	52	54	53	59	49	44	60	59	44	49	54	47	34	31	37	37	38	39	42	45	....	50.1
	Minimum	29	23	23	27	25	25	27	25	23	23	27	30	34	27	26	29	29	32	29	29	32	34	30	24	12	15	20	25	29	33	....	26.5
Southern Division.																																	
Beckley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	22	22	23	28	29	30	30	25	28	54	55	48	49	35	34	28	29	29	31	31	28	32	22	22	11	20	29	25	28	25	....	30.1
Bluefield	Maximum	44	43	46	60	61	67	61	61	61	61	64	65	55	49	53	48	57	65	60	61	55	52	43	26	35	37	42	44	48	50	....	52.5
	Minimum	29	22	23	28	28	30	38	33	28	33	31	37	45	42	35	33	33	33	40	34	38	40	26	18	15	23	26	38	36	33	....	31.6
Charleston	Maximum	65	60	61	61	61	65	66	63	65	69	68	62	62	58	57	54	61	66	64	61	60	58	57	55	51	48	47	49	55	56	....	59.5
	Minimum	29	28	26	27	29	30	29	31	26	27	29	32	31	32	35	37	32	34	32	25	35	42	30	23	22	24	23	30	42	40	....	30.4
Elkhorn	Maximum	45	43	48	57	58	59	63	60	59	61	61	62	60	52	52	51	55	58	56	59	57	54	46	29	32	37	43	42	47	52	....	51.9
	Minimum	31	27	24	27	30	31	30	31	28	31	35	40	48	45	38	37	32	31	40	34	36	44	29	21	15	26	30	39	42	38	....	33.0
Green Sulphur Spgs.	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hinton§	Maximum	46	45	50	68	62	64	65	61	61	64	59	60	58	53	56	41	58	60	64	59	60	51	34	28	36	35	36	44	42	44	....	52.1
	Minimum	24	23	22	25	25	26	29	29	25	27	27	33	36	42	32	32	30	31	32	32	30	38	31	24	18	24	24	28	35	38	....	29.1
Holcomb§	Maximum	43	45	48	61	63	64	62	61	62	64	68	66	64	56	54	40	50	64	53	64	59	60	29	36	32	29	42	45	46	48	....	52.6
	Minimum	25	18	18	21	24	23	26	21	20	20	26	29	33	31	30	32	32	32	26	24	26	29	27	19	9	7	24	28	37	34	....	25.0
Huntington§	Maximum	44	45	52	55	58	66	47	52	59	63	64	46	49	44	47	57	63	45	55	59	50	33	29	36	34	35	43	44	49	56	....	49.3
	Minimum	28	29	27	30	30	30	31	33	30	30	32	33	38	35	37	31	31	31	25	25	42	32	24	22	25	25	26	29	41	41	....	30.8
Lewisburg	Maximum	43	43	48	60	61	63	64	61	63	63	61	60	55	55	55	49	58	63	58	57	57	52	45	29	33	31	32	42	42	47	....	51.7
	Minimum	23	16	17	21	20	21	35	19	20	22	25	32	39	36	29	34	28	24	37	22	35	39	27	18	16	23	17	30	35	34	....	26.5
Marlinton	Maximum	36	38	44	52	54	58	56	54	54	58	58	60	56	52	50	40	48	56	52	54	48	44	38	30	26	24	34	38	36	38	....	46.2
	Minimum	22	12	14	20	14	18	26	14	12	18	24	24	30	28	20	32	20	18	24	16	30	30	24	18	14	18	10	28	28	28	....	21.1
Point Pleasant	Maximum	45	48	56	61	63	71	60	58	64	66	61	64	51	55	53	51	62	67	59	61	60	60	55	31	38	38	38	42	47	54	....	54.6
	Minimum	26	23	23	23	22	26	28	23	23	28	29	32	37	30	27	24	24	30	24	18	37	37	27	18	16	17	23	35	36	41	....	26.9
Powellton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Robertsburg§	Maximum	44	49	55	60	62	70	60	59	60	61	46	43	49	45	62	42	....	....	50	61	62	51	33	29	35	37	43	47	52	49	....	50.6
	Minimum	27	24	23	26	24	25	30	27	25	28	33	34	30	34	28	29	28	....	....	20	24	41	31	22	16	21	22	29	41	42	....	28.0
Ryan	Maximum	39	38	49	44	51	60	58	45	65	65	70	67	60	48	52	53	60	60	58	60	60	60	44	32	45	45	40	37	45	60	....	52.3
	Minimum	24	20	19	19	19	23	26	20	19	24	26	30	35	32	28	34	24	25	27	17	36	41	29	21	10	21	16	20	33	38	....	25.2
Sutton	Maximum	45	47	51	52	53	53	52	58	58	58	58	55	52	55	55	52	48	52	52	52	60	60	57	57	57	57	52	46	45	43	47	52.9
	Minimum	30	28	25	21	26	22	22	27	20	28	35	35	32	35	32	35	32	31	29	20	32	42	31	21	11	19	17	32	34	33	....	27.8
Union§	Maximum	40	40	48	53	64	75	71	70	69	78	74	72	70	71	67	42	63	67	64	58	66	45	37	37	45	40	45	41	....	....	....	57.0
	Minimum	24	17	17	20	20	22	23	20	21	23	25	27	24	25	24	18	28	24	23	23	31	39	30	20	15	20	22	37	35	34	....	24.4
White Sulphur Spgs.	Maximum	48	48	51	61	63	67	68	67	66	67	68	65	54	60	57	53	59	65	58	60	62	50	36	30	35	38	33	68	64	66	....	56.3
	Minimum	22	15	15	19	18	19	25	19	16	19	21	23	37	35	25	37	26	21	37	37	22	27	29	19	16	14	18	33	38	39	....	24.7
Williamson§	Maximum	47	46	53	62	63	67	64	61	63	66	66	57	51	46	50	44	60	66	51	60	64	51	33	35	38	39	41	44	51	56	....	53.2
	Minimum	25	29	26	26	30	32	32	35	31	31	35	36	40	43	41	40	33	34	35	33	33	37	31	25	20	23	25	35	40	42	....	32.5

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

51.05
NWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

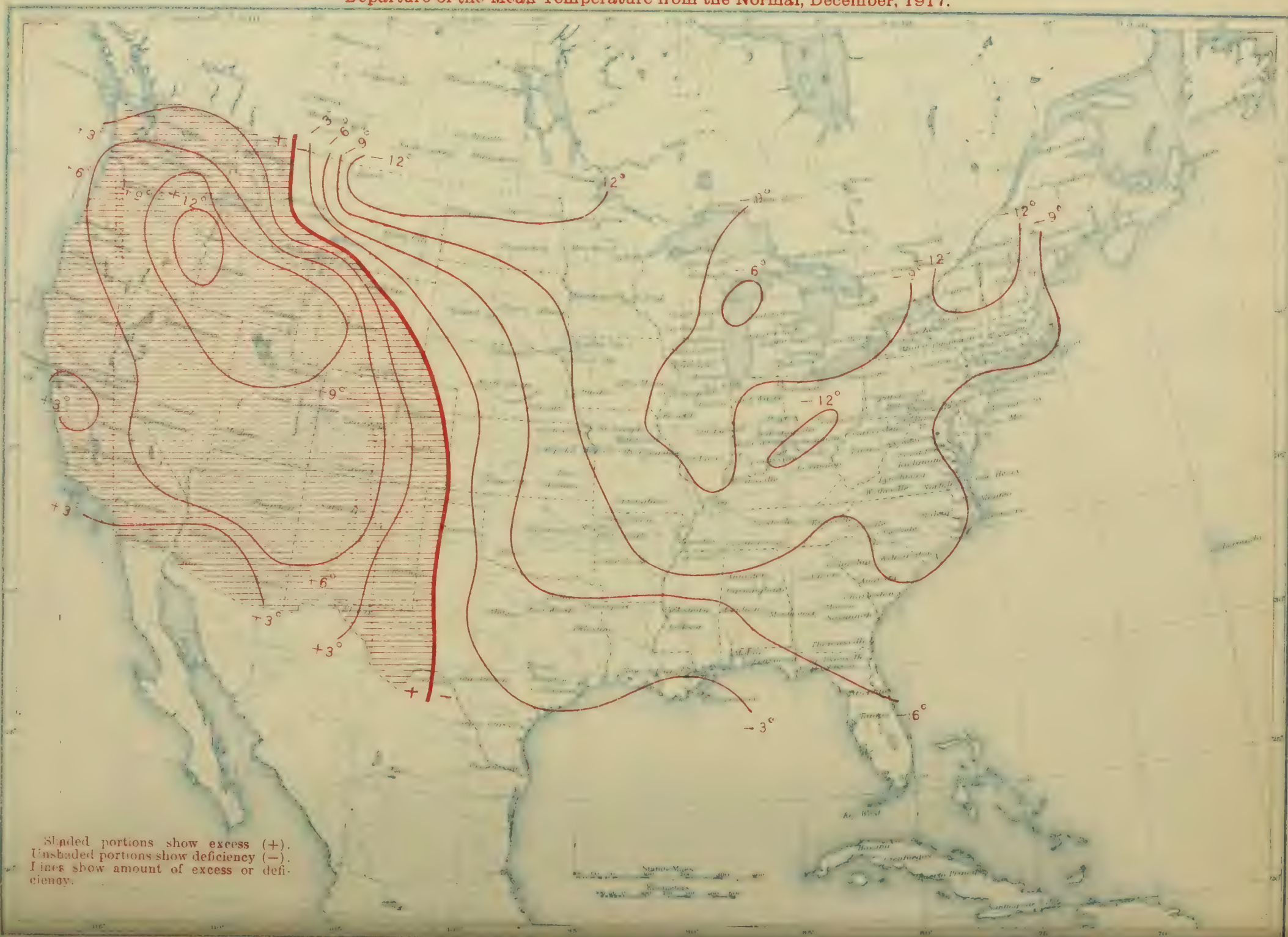
WEST VIRGINIA SECTION

DECEMBER, 1917

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JANUARY 26, 1918

Departure of the Mean Temperature from the Normal, December, 1917.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXV. PARKERSBURG, W. VA., DECEMBER, 1917. No. 12.

GENERAL SUMMARY.

The past month was the coldest and driest December of record for the State. In fact, it was the coldest month of record for the State since 1895 and the driest winter month, except January, 1895. The lowest temperatures of record occurred in many sections of the southeastern counties, where the morning readings on the 30th ranged generally from 25° to 37° below zero. The lowest temperature of reliable record, 37° below zero, occurred at Lewisburg on the morning of the 30th. Nearly all the precipitation was received as snow, and the amounts were fairly well distributed throughout the month and over the State. The conditions were unfavorable for winter grains, owing to the lack of sufficient snow cover during the cold wave at the beginning of the second decade. As a rule, from 2 to 6 inches of snow was on the ground during the record-breaking cold weather at the close of the month.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.29 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.74 inches on the 26th, and 29.26 inches on the 8th. Elkins, 30.77 inches on the 30th, and 29.25 inches on the 8th.

TEMPERATURE.

The monthly mean for the State, 48 stations reporting, was 24.3°. The departure from the normal for 40 stations having ten or more years of record was —9.1°. The month opened with normal temperature, but, as noted above, exceptionally cold weather prevailed from the 7th to the 19th and after the 27th. The highest temperatures occurred generally from the 1st to the 4th and the 20th to the 24th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 86 per cent; 8 p. m., 79 per cent. The December averages for the same hours for the past 29 years are 82 and 76 per cent, respectively. Elkins, 8 a. m., 88 per cent; 8 p. m., 81 per cent. The December averages for Elkins for the same hours for the past 17 years are 86 and 80 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 65 stations reporting, was 1.51 inches. The departure from the normal for 45 stations having ten or more years of record was —1.76 inches. Snow was quite general daily from the 7th to the 10th, 12th to the 15th, 24th to the 26th, and 28th to the 30th, and moderate amounts were recorded on the 8th, 25th, and 29th, with light falls on other days.

WIND.

The average wind velocity at Parkersburg was 3.7 miles per hour, or 2.5 miles below the December average for the past 27 years. The average at Elkins was 3.6 miles per hour, or 2.1 miles below the December average for 18 years. The highest velocity at Parkersburg was 29 miles per hour from the southeast on the 8th, and at Elkins 24 miles per hour from the southeast on the 8th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 35 per cent of the possible amount, or 9 per cent above the December average for 20 years. The average at Elkins was 38 per cent, or 10 per cent above the December average for 18 years.

MISCELLANEOUS PHENOMENA.

Aurora: Holcomb, Morgantown, and Nuttallburg, 18th.

Fogs, dense: Charleston, 6th; Elkins, 17th and 18th; Davis, 4th; Dam No. 26, 6th, 15th, 17th, and 18th; Fairmont, 6th; Grafton, 17th and 21st; Green Sulphur Springs, 21st; Huntington, 5th; Mannington, 6th; Marlinton, 21st; New Cumberland, 13th, 17th, and 18th; Parkersburg, 6th and 17th; Pickens, 3d, 4th, and 28th; Rowlesburg, 21st; St. Marys, 6th; Williamson, 5th, 6th, 12th, 13th, 14th, 15th, 17th, 19th, and and 21st: Wheeling, 3d, 6th, 13th, 18th, 23d, 27th, 30th, and 31st.

Halos, lunar: Bayard, 23d; Elkins, 27th; Nuttallburg, 28th; Parkersburg, 20th, 22d, 25th, and 27th; Pickens, 22d and 25th; Piedmont, 26th.

Haze, light: Moundsville, 12th; Wardensville, 4th and 7th.

Sleet: Davis, 22d; Holcomb, 1st; Nuttallburg, 29th; Smithfield, 8th and 28th.

COMPARATIVE DATA FOR DECEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	40.9	75	6	3.27	....	....	....	..	..	..
1892	34.1	72	−10	2.91	....	....	....	..	..	..
1893	37.1	76	7	2.05	3.73	0.56	....	10	8	13
1894	36.3	80	−29	4.04	6.56	1.71	....	11	7	13
1895	36.9	72	− 6	2.87	4.14	1.85	7.1	8	9	14
1896	35.3	67	2	1.68	2.88	0.57	....	12	9	10
1897	37.3	72	4	4.00	6.79	2.05	....	6	9	16
1898	35.4	69	−12	2.66	4.23	0.71	7.0	12	8	11
1899	35.3	77	−17	2.81	4.46	1.22	3.9	11	8	12
1900	34.6	66	3	2.26	3.45	1.32	1.0	11	7	13
1901	32.3	75	− 9	5.84	8.97	3.57	3.8	7	8	16
1902	33.9	70	− 2	5.33	9.95	2.01	9.4	5	7	19
1903	26.5	59	−11	2.00	4.43	0.30	7.8	12	8	11
1904	32.8	71	−20	3.12	5.91	1.63	9.8	8	7	16
1905	35.6	70	3	3.11	5.24	1.30	3.4	11	6	14
1906	35.9	70	− 1	4.73	11.15	1.83	6.2	5	6	20
1907	35.5	70	2	3.36	9.31	0.70	5.2	9	8	14
1908	36.4	73	5	3.03	7.36	1.06	6.0	9	8	14
1909	28.8	78	−10	2.55	6.00	1.16	10.9	9	8	14
1910	28.4	72	− 8	2.72	6.90	1.00	14.6	7	7	17
1911	39.3	74	4	3.27	5.58	1.25	1.6	9	5	17
1912	35.8	76	− 6	2.88	5.55	1.45	7.1	12	7	12
1913	36.4	68	3	2.82	3.81	1.10	2.9	9	8	14
1914	30.3	70	−20	5.46	8.04	2.58	12.3	7	4	20
1915	32.8	68	0	4.35	7.19	1.35	7.6	5	7	19
1916	32.8	77	18	3.33	6.38	0.85	10.6	13	7	11
1917	24.3	67	−37	1.51	3.32	0.47	11.8	11	6	14
Means and extremes	34.0	80	−37	3.26	11.15	0.30	7.2	9	7	15

Climatological Data for December, 1917.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	6	18.8	−10.4	45	3	−18	30	34	0.79	−3.24	0.32	13.8	13	8	1	22	w.	G. C. Dixon.
Brandywine	Pendleton	.....	0	22.7	.....	55	21	−28	30	39	0.81	.....	0.50	10.5	4	19	3	9	n.	Elmer Keister.
Burlington	Mineral	875	22	22.9	− 9.7	53	24†	−16	30	35	0.80	−1.86	0.40	8.0	4	12	12	7	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	27	.....	.....	.....	.....	.....	.....	.....	1.20	−1.51	0.60	6.0	3	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	24	23.6	− 9.4	45	1†	− 4	30†	29	1.35	−1.35	0.70	13.5	6	17	3	11	n.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	20	23.8	− 9.5	54	20	−26	30	45	1.30	−0.99	0.60	13.0	5	21	3	7	.....	M. S. Henkel.
Piedmont	Mineral	919	4	24.0	.....	51	21	− 8	30	29	0.79	.....	0.41	9.2	8	13	5	13	nw.	C. A. Suter, Jr.
Romney [c]	Hampshire	824	19	24.2	− 8.1	58	1	−15	30	42	1.30	−1.20	0.80	13.0	5	10	10	8	....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	18	22.3[b]	−11.6	56[b]	21	−25[b]	30	31[b]	1.30	−0.98	0.70	13.0	4	11	9	11	w.	J. M. Mallow.
Wardensville	Hardy	1,200	0	20.2[b]	.....	47[b]	1	−17[†]	30	32[b]	1.10	.....	0.50	11.0	4	15[d]	4[d]	10[d]	sw.	Luther F. Sutton.
Averages and	extremes	.....	....	22.5	− 9.8	58	1	−28	30	45	1.07	−1.59	0.80	11.1	6	14	6	11	w.	
Northern Division.																				
Bens Run	Pleasants	622	15	25.5	− 7.7	52	20†	− 7	11	34	1.34	−2.58	0.68	19.0	7	21	2	8	.....	J. D. Riggs.
Brandonville	Preston	1,809	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. T. Miller.
Buckhannon	Upshur	1,411	20	25.0	− 7.9	52	3	−28	30	43	1.70	−2.39	0.45	8.5	10	9	5	17	.....	H. A. Darnall.
Central Station	Doddridge	950	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. H. Doak.
Cortland	Tucker	3,300	1	.....	.....	.....	.....	.....	.....	.....	1.50	.....	0.40	11.0	4	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	15	26.2	− 7.8	56	24	−17	30	37	1.18	−2.09	0.23	6.5	12	9	1	21	w.	J. M. Reed.
Davis	Tucker	3,093	8	.....	.....	.....	.....	.....	.....	.....	2.04	.....	0.59	16.0	11	12	3	16	sw.	Ross C. Male.
Elizabeth	Wirt	646	5	.....	.....	.....	.....	.....	.....	.....	1.07	.....	0.26	.....	12	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,940	16	22.5	−10.0	52	3	−28	30	37	1.17	−2.25	0.42	8.8	10	5	8	18	w.	U. S. Weather Bureau.
Fairmont	Marion	883	11	24.8	− 7.9	51	18†	−13	30	42	0.98	−2.48	0.36	5.5	13	16	1	14	w.	F. P. Hall.
Glenville	Gilmer	758	23	27.0	− 8.0	54	3	−25	30	49	0.97	−2.77	0.30	6.0	9	3	9	19	w.	Howard R. Brannon.
Grafton	Taylor	1,000	24	25.1	− 8.9	51	24	−20	30	37	1.92	−1.71	0.67	2.5	6	9	5	17	e.	W. C. Byers.
Lost Creek	Harrison	1,026	19	25.4	− 8.0	53	3†	−26	30	48	1.10	−2.13	0.42	7.5	7	9	4	18	w.	Allen Smith.
Mannington	Marion	974	14	24.4	− 8.1	51	20†	−21	30	44	1.10	−2.29	0.28	6.4	13	8	6	17	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	24	26.0	− 8.0	50	24	−13	30	39	0.83	−2.39	0.28	4.4	9	12	2	17	n.	R. W. Muldoon.
Moundsville	Marshall	642	14	23.3[e]	−10.4	52[a]	20†	−10	30	39[a]	1.22	−1.83	0.60	9.5	5	8	1	22	sw.	M. Z. White.
New Cumberland	Hancock	987	19	21.4	− 9.6	48	24	−15	30	37	1.43	−1.13	0.60	11.3	8	6[d]	14[a]	10[e]	nw.	M. F. Smith.
New Martinsville	Wetzel	634	23	25.2	− 9.7	53	3	−11	30	38	1.10	−2.52	0.45	4.0	4	10	1	20	n.	Wm. Aukrom,
Parkersburg	Wood	638	30	24.8	−10.4	52	3	−10	30	34	0.90	−1.87	0.45	8.6	11	9	7	15	n.	U. S. Weather Bureau.
Parsons	Tucker	1,656	17	22.9	− 8.5	48	21†	−26	30	46	1.05	−2.73	0.85	2.0	3	10	0	21	.....	J. W. Swisher.
Philippi	Barbour	1,149	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Okey J. Robinson.
Pickens	Randolph	2,697	14	23.7	− 8.6	58	18	−20	30	47	3.07	−1.96	0.46	19.0	14	10	3	18	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	30	.....	.....	.....	.....	.....	.....	.....	1.77	−2.07	0.65	.....	14	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	8	.....	.....	.....	.....	.....	.....	.....	1.40	.....	0.45	.....	13	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	11	23.2	− 8.6	52	20	−16	30	41	2.40	−1.66	0.54	14.5	13	18	4	9	se.	G. M. Whisler.
Terra Alta	Preston	2,612	16	20.7	− 9.8	46	21	−18	30	30	0.95	−4.70	0.20	8.0	9	14	6	11	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Waugh.
Weston	Lewis	1,026	21	27.4	− 7.7	54	3	−20	30	34	1.25	−2.46	0.50	8.5	8	4[d]	6[d]	17[d]	.....	Weston State Hospital.
Wheeling	Ohio	645	30	22.9	.....	50	24	− 9	30†	36	1.61	−1.38	0.84	17.1	13	12	2	17	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	.....	24.4	− 8.7	58	18	28	30	49	1.40	−2.27	0.85	9.4	10	10	5	16	w.	
Southern Division.																				
Bancroft	Putnam	574	12	25.4	−10.1	58	3	−19	30	43	2.09	−1.04	0.42	12.0	12	15	6	10	ne.	R. E. Dent.
Beckley	Raleigh	2,440	16	24.3[g]	− 9.4	60[g]	21†	−20	30	49[g]	1.91	−1.10	0.80	15.0	5	8	13	10	w.	John A. Ewart.
Bluefield	Mercer	2,558	21	26.9[a]	− 8.1	56[a]	3†	−25[a]	30	32[a]	2.57	−0.38	0.80	22.5	8	17	6	8	.....	Norfolk & Western Ry
Camden-on-Gauley	Webster	2,052	1	.....	.....	.....	.....	.....	.....	.....	1.36	.....	0.26	11.0	7	.....	.....	.....	.....	Miss Katie Jarvis.
Charleston	Kanawha	597	13	32.1	− 7.2	65	23	−17	30	62	2.98	−0.31	1.15	17.5	10	6	0	25	n.	C. V. Lewis.
Clay	Clay	706	0	.....	.....	.....	.....	.....	.....	.....	1.69	.....	0.8.	.....	5	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba	Jackson	650	14	26.7	− 7.2	57	18	−22	30	52	0.47	−2.75	0.20	3.8	5	8	14	9	nw.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	0	.....	.....	.....	.....	.....	.....	.....	0.73	.....	0.30	.....	8	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	0	.....	.....	.....	.....	.....	.....	.....	0.78	.....	0.50	.....	5	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	1	.....	.....	.....	.....	.....	.....	.....	0.59	.....	0.25	4.5	6	.....	.....	.....	.....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	0	.....	.....	.....	.....	.....	.....	.....	1.32	.....	0.40	.....	.....	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn††	McDowell	1,933	23	28.3	9.0	57	3	17	30	31	3.20	+0.05	0.65	22.0	9	6	12	13	w.	J. J. Lincoln.
Evans	Jackson	606	4	26.6	.....	56	3	22	30	36	1.79	.....	0.40	9.0	9	12	2	17	.....	B. F. Sayre.
Gary	McDowell	1,426	0	.....	.....	.....	.....	.....	.....	.....	1.42	.....	0.35	.....	11	.....	.....	.....	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	20	26.6	− 7.3	50	24	−22	30	38	2.40	−0.17	0.60	24.0	9	8	8	15	w.	W. H. Gwinn.
Hinton	..do	1,450	19	23.0	−12.6	54	1	−13	30†	31	1.64	−1.19	0.44	16.5	9	8	0	23	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	24	23.5	.....	50	24	−22	30	41	1.75	.....	0.80	15.0	10	9	3	19	.....	R. C. Ferguson.
Huntington	Cabell	538	22	25.6	− 8.8	58	3	−14	30†	40	1.78	−1.66	0.49	14.5	10	10	2	19	.....	L. H. Hutchinson.
Kayford	Kanawha	1,335	0	.....	.....	.....	.....	.....	.....	.....	1.84	.....	0.57	.....	12	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	16	22.1	−10.4	51	24	−37	30	43	1.53	−1.25	0.60	14.0	6	4	13	14	nw.	Geo. T. Argabate.
Logan	Logan	687	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	17	18.0	−11.8	44	24	−24	30	58	2.11	−1.05	0.80	18.0	7	8	15	8	n.	S. L. Brown.
Nuttallburg	Fayette	2,252	23	.....	.....	.....	.....	.....	.....	.....	2.53	−1.35	0.80	22.0	6	12[d]	5[d]	5[d]	.....	Miss Donna Tully.
Point Pleasant	Mason	553	23	25.0	−10.2	57	3	−19	30	44	1.38	−1.84	0.64	8.0	6	6	4	21	nw.	W. D. Holmes.
Powelton	Fayette	933	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. C. Lamport.
Rainelle	Kanawha	2,425	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. N. Bobbitt.
Raleigh	Raleigh	2,130	0	.....	.....	.....	.....	.....	.....	.....	1.78	.....	0.91	11.5	7	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	0	.....	.....	.....	.....	.....	.....	.....	0.81	.....	0.30	.....	7	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	16	23.8[a]	−10.6	58[a]	3	−22[a]	30†	43[b]	1.21	−2.40	0.27	8.5	8	8[d]	4[a]	18[d]	.....	E. C. Brace, Jr.
Ryan	Roane	709	13	25.4	− 8.7	60	3	−27	30	53	1.56	−1.88	0.40	9.6	13	10	6	15	.....	Wm. E. Ryan,
Sissonville	Kanawha	625	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. M. McKown.
Sutton	Braxton	839	10	26.8	− 6.9	51	3†	−21	30	68	2.37	−1.36	0.95	13.0	7	14	11	6	.....	C. B. Eakle.
Union	Monroe	2,250	12	22.2[b]	− 9.6	62[b]	4	−34[a]	30	44	1.98	−0.45	0.60	20.0	5	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	6	24.8	.....	67	3	−34	30	44	3.32	.....	0.82	25.0	6	21	3	7	.....	J. M. Ayres.
Williamson	Mingo	660	16	27.4	− 9.8	57	24	−13	30†	37	2.52	−1.41	0.64	12.1	12	8	8	15	w.	J. F. Keyser.
Averages and	extremes	.....	....	25.1	− 9.3	67	3	−37	30	62	1.74	−1.21	1.15	14.2	8	10	7	14	w-nw	
State averages and	extremes	.....	....	24.3	−9.1	67	3	−37	30	62	1.51	−1.76	1.15	11.7	8	11	6	14	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[c] Approximated by the observer

Daily Precipitation for December, 1917.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
ayard	Potomac	T.		.10				.02	.05	.09	.01			.01	.02	T.	.03						.01	.02	.30	.02			T.	.08			0.79
ranlywine	do								.50				.05												T.	.11				.15			0.81
urlington	do							.10	.40								.10													.20			0.80
arpers Ferry	do	T.					T		.40	.20				T	.60			T.	T.	T.			T.										1.20
artinsburg	do			T.					.70				.05	.35			.02			.03										.20			1.35
oorefield	do								.60				.20	.15			.05													.30			1.30
iedmont	do			T.				T.	.41				.09	.04	.05		.12								.01	.01				.06			0.75
omney	do			T.					.80				.10		.20		.10												.10				1.30
pper Tract	do								.70				.20													.10				.30			1.30
ardensville	do		T.	T.				T.	.50	T.		.20		.10														T.		.30			1.10
Northern Division.																																	
ens Run	Ohio	.02						.05	.68					.08	.10											.28				.13			1.34
randonville	Monongahela																																
uckhannon	do			.05				T.	.15	T.	.10			.10	.10	.20									.45	.10			.05	.40			1.70
entral Station	Middle Is. Creek																																
ortland	Monongahela												.40	.30												.10			.40				1.50
reston	Little Kanawha	.16						T.	.10	.23	.05		.03		.05	.10							T.		.05	.18	.05			.15	.03		1.18
avis	Monongahela			.15				.10	.20	.10	.20	.05		T.	.50	.10	.05						T.			.34			T.	.25			2.04
lizabeth	Little Kanawha	.03							.15	.13	.04		.04		.02	.06	.01						.02		T	.23	.08			.26			1.07
lkins***	Monongahela	.04		.03	T.			.01	.08	.09	.02	.01	.05	.01	.04	T.	T.					.04	.01	T.	.25	.21			.09	.21		T.	1.17
airmont	do	.03			T.			T.	.09	.12	.05		.05		.03	.02	.04						.02		.06	.36	T.		T.	.09	.02		0.98
lenville	Little Kanawha	.12		T.				T.		.03	.08		.08		.10	T.									.06	.10				.30	.10		0.97
ralton	Monongahela			T.				*	.20					T.	.47										*	.58			T.	.67			1.92
ost Creek	do			T.					.12	.04	.05			T.	.05	T.							T.		.08	.42			T.	.34			1.10
lamington	do	.03						.05	.28	.04	.04		.04	T.	.03	.02	.05						T		.15	.20			.03	.13			1.10
lorgantown	do			T.				.06	.29	.05	T.			T.	.05		.05						T.		.05	.28	.02	.07					0.83
loundsville	Ohio						T.		.60					.10	T.		.07								T.	.35			T.	.10			1.22
ew Cumberland	do					T.	.06	.05	.60	.30				.10	.02		.10									.20			T.	T.			1.43
ew Martinsville	do								.40					.10	T.		T.						.15			.45			T.	T.			1.10
arkersburg ***	Ohio					T.	.03	.02	.43	.03		T.	.01	.06	.06								T		T.	.09	.06			T.	.06		T.	0.90
arsons	Monongahela							.10																T.	.85	T.			.10				1.05
hilippi	do																																
ickens	do	.40		.12				.10	.20	.20	.10			.10	.30	.10	T.						T.		.46	.39			.10	.40		.10	3.07
owlesburg	do	.08			T.			.04	.05	.16	.12		.05	T.	.08	.06	.10								.09	.65	.08		T.	.15	.06		1.77
aint Marys	Ohio	.04						.03	.22	.45	.05		.04		.01	.05	.04						.03		.06	.25				.08			1.10
mithfield	Fishing Creek	.04						.03	.25	.54	.05		.03		.15	.30	.05						.18		.07	.42			T.	.25			2.40
erra Alta	Monongahela			.05			.10	.10	.20					.10	.10										.10				.10	.10			0.90
ellsburg	Ohio																																
eston	Monongahela	.40						.05	.05		.05				.10	.10										.10	.10							1.25
heeling	Ohio	.01			T.		T.	.07	.15	.69	.06		.01	.01	.04	T.	.08	T.	T.						.04	.32			T.	.11	.02		1.61
Southern Division.																																	
ancroft	Great Kanawha	.23						T.	.25		T.				.05	.10	.20	.20	.10						.04	.42	.20		.10	.20			2.09
eckley	do				.41					.10	.30															.30				.80			1.91
hefield	do	.28			.04				.30		.05		.20	.30													.60			.80			2.57
amden-on-Gauley	do		.26					T.	T.	.20	T.	T.	T.	.20		.20	.10		T.						.20			.20				1.56
harleston	do	.18						T.	.25		.10		.20		.35	.12							.25		T.	.80	.35			.38	T.	T.	2.98
lay	do									T.	T.			.20		.16										.83	.20			.30			1.69
uba	Sand Creek	.10				T.		T	.10	T				T.	.05								T.		T.	.02			T.	.20		T.	0.47
am 19 O. R.	Ohio	.02						.01	.19	.30			T.	T.			.03								.04	.13	T.			.01	T.		0.73
am 20 O. R.	do							.30	.30	.01	T.						.02	T.							.15	T.				T.	T.		0.78
am 22 O. R.	do	.14						T.	.08								.06								.04	.02	T.			.25	T.		0.56
am 26 O. R.	do	.05							.28	.28																.05	.26				.40		1.32
lkhorn	Big Sandy	.45		.05	.12				.30	T.				.40	T.	T.										.18	.20			.65		.55	3.20
yans	Ohio	.16				T.			.40	.04	.10	T.	T.	.12	.13	T.									T.	.32			.40	.12			1.79
ary	Big Sandy			.07				.18	.10	.02		.20		.01											.35	.25			.20	.03		.01	1.42
reen Sulphur Spgs.	Great Kanawha							.10	.60			.20		.10	.10	.20									T.	.40			T.	.60		.10	2.40
inton	do	.10			T.				.38	.12	.04		.22		T										T.	.04	.30		T.	.28	.16		1.64
olcomb	do							*	*	.43			T.	*	*	.15									*	.80			*	.37			1.75
untington	Ohio			T.	T.			.12	.36	.24	.08		.10		.03	.04							T.		.40	.09				.32	T.	T.	1.7
axford	Great Kanawha	.31		T.	.02				.23	*	.11		.07		.10								.11		*	.57				*	.32		1.84
ewisburg	do	.11		.02					.40		T.		.10		T.										T.	.30				.60			1.53
ogan	Guyandotte																																
adison	Great Kanawha																																
arlinton	do	T.		T.	.10			T.	.80		T.		.10		T.	T.				T.					.16	.35		.20		.40		T.	2.11
uttalburg	do					.20			.26	.60													T.		.07	.80				.60		T.	2.53
oint Pleasant	Ohio								.44	.20	T.			T.		T.									.21	.11	.12	T.		.30			1.38
owellton																																	
ainelle	Great Kanawha																																
aleigh	do	.25			.04				.15	T.			.20												.14	.77				.25	T.		1.71
enova	do	.20								.02			.30												.20	.02				.05	.02		0.81
obertsburg	do							.15	.21			T.	.10			.10							.08		.27	T.				.20	.10		1.21
yan	do							.03	.24	.01	.06		.10	.05	.12								.04		.11	.50			.02	.29		.02	1.55
issonville	do																																
pencer	Little Kanawha																																
utton	Great Kanawha			T	T.				.11	.10			.10		.20										.96	.10				.80			2.16
nion	do	.08							.30		.40																.60				.60			1.98
hite Sulphur Spgs	do	.8			T.			.60			.20		.30												.60					.80			3.10
illiamson	Big Sandy	.01		.01	.02			.37	.14	T.			.20		.05	.02									.64	.35				.50	.10	T.	2.13

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for December, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	38	32	45	44	30	33	30	32	23	6	12	14	29	23	29	21	12	28	40	42	44	40	33	35	38	29	29	28	18	0	10	28.0
	Minimum	29	23	23	29	23	18	15	15	7	8	8	2	5	3	4	4	5	10	8	30	28	20	12	19	5	6	7	12	5	18	4	9.5
Brandywine	Maximum	50	49	50	48	40	43	40	34	30	15	20	24	21	25	25	27	31	39	42	49	55	44	38	52	50	36	31	37	32	9	19	35.6
	Minimum	34	21	22	35	20	17	19	24	2	0	16	5	12	8	2	4	4	3	3	13	19	30	11	30	32	3	0	19	3	28	8	9.8
Burlington	Maximum	45	44	36	44	42	41	37	36	30	19	18	23	18	21	23	24	27	32	32	50	49	45	35	53	53	30	31	39	23	10	16	33.1
	Minimum	36	25	23	30	23	20	23	24	5	3	4	3	6	15	3	5	8	8	4	15	22	23	12	24	28	12	8	18	5	16	0	12.7
Martinsburg§	Maximum	45	45	37	43	45	41	32	33	20	16	20	23	28	21	22	21	24	29	35	39	45	36	35	43	38	27	28	37	12	12	13	30.5
	Minimum	34	35	28	30	28	29	31	25	7	6	6	8	10	18	12	8	12	14	16	26	22	23	12	14	32	17	12	13	5	4	4	16.7
Moorfield	Maximum	49	52	43	42	48	45	42	34	34	21	22	30	20	20	30	25	33	41	39	54	50	44	39	46	47	32	34	36	29	19	17	36.0
	Minimum	36	31	23	32	20	21	20	27	1	0	15	13	10	13	6	0	7	7	3	12	19	32	13	25	31	14	12	22	5	26	6	11.5
Piedmont	Maximum	44	42	38	44	39	38	36	31	32	14	20	22	21	27	21	22	26	32	41	50	51	48	35	47	47	29	28	37	18	11	14	32.2
	Minimum	36	32	26	35	29	22	29	24	3	1	2	8	9	4	11	7	11	19	10	21	28	27	14	27	27	13	10	17	8	8	4	15.9
Romney	Maximum	58		48	42	46	45	42	35	29	20	21	26	20	25	26	26	30	35	36	57	55			52	48	36	38	32	20	18	24	35.4
	Minimum	45		28	34	24	21	24	25	3	0	1	0	4	15	3	5	11	13	5	23	26			10	28	15	9	18	5	5	6	12.9
Upper Tract	Maximum	40			40	43	43	40	33	32	22	20	21	23	26	23	26	33	34	40	54	56	51	40	48	40	40	30	29	26	8	15	33.7
	Minimum	33			24	20	22	20	26	1	1	13	6	8	12	9	5	3	5	6	20	30	31	13	27	27	27	6	4	5	25	6	10.9
Wardensville §	Maximum	47	44	46	43	38	42	38	36	17	18	19	20	18	20	25	32										28	30	25	28	15	15	28.9
	Minimum	32	26	28	25	22	21	21	24	7	3	7	3	7	2	7	2	8									15	12	14	14	17	5	11.5
Northern Division.																																	
Bens Run	Maximum	43	46	50	44	49	43	36	37	30	11	16	31	29	24	25	32	34	41	42	52	46	44	41	52	47	32	39	35	15	17	19	35.3
	Minimum	35	27	33	35	28	25	25	26	1	2	7	5	7	11	1	6	7	7	25	29	29	23	18	40	21	11	14	15	2	6	2	15.7
Buckhannon	Maximum	45	45	52	46	37	40	35	44	25	11	15	37	32	21	18	32	35	43	42	46	48	48	45	48	45	25	36	35	32	15	21	35.4
	Minimum	35	24	28	35	32	22	23	24	0	1	9	8	2	11	10	11	8	8	18	27	29	23	17	36	23	10	9	16	2	28	1	14.6
Creston	Maximum	47	45	54	51	40	42	38	40	30	14	17	28	30	28	20	35	38	44	42	49	48	45	47	56	47	28	37	35	21	11	20	36.4
	Minimum	41	25	29	37	24	22	26	25	1	1	5	8	5	13	2	15	5	7	20	25	26	31	19	36	27	14	13	21	6	17	1	16.1
Elkins	Maximum	43	42	52	43	35	42	31	39	15	8	18	28	32	15	18	30	39	44	39	47	49	35	44	51	47	28	37	31	11	9	18	32.9
	Minimum	31	26	26	32	25	19	21	14	1	3	8	6	0	10	8	13	10	8	14	24	29	19	13	38	21	8	7	11	18	28	0	12.1
Fairmont§	Maximum	45	47	50	39	39	44	34	39	14	11	21	35	32	17	24	34	45	51	41	51	48	37	44	50	30	28	41	32	13	14	20	34.5
	Minimum	10	26	30	35	27	24	25	26	1	0	2	2	4	14	9	9	9	11	29	30	29	18	25	29	11	11	13	4	13	12	15.1
Glenville	Maximum	49	49	54	53	45	50	41	47	34	15	19	37	33	30	29	37	45	53	41	53	59	49	47	51	49	36	43	35	24	18	25	40.0
	Minimum	10	22	26	37	26	18	26	24	0	0	11	4	0	14	2	13	3	4	15	21	24	29	15	35	27	7	9	23	5	25	0	14.0
Grafton	Maximum	46	41	50	47	39	42	36	40	38	14	17	27	35	27	18	34	38	44	43	49	49	43	46	51	47	26	39	34	17	8	17	35.5
	Minimum	36	23	27	23	30	22	26	25	1	0	5	7	2	10	9	9	11	10	18	28	29	26	15	35	25	8	8	15	1	20	2	14.7
Lost Creek	Maximum	46	47	53	50	42	44	43	38	30	13	18	34	33	26	24	35	44	53	42	50	48	46	43	50	47	24	41	34	21	12	20	37.1
	Minimum	36	21	25	35	30	18	30	30	1	1	8	0	0	12	4	6	3	5	16	27	27	28	12	37	24	4	5	21	3	26	0	13.6
Mannington	Maximum	46	45	50	47	40	40	38	40	34	10	14	29	31	28	21	33	39	47	41	51	48	44	40	51	47	24	39	34	17	10	18	35.4
	Minimum	37	24	27	34	21	22	25	25	0	1	9	1	1	13	6	4	1	3	16	27	26	27	15	34	24	5	8	17	4	21	5	13.5
Morgantown	Maximum	46	44	49	46	38	40	34	37	31	10	15	30	33	27	18	32	37	44	42	48	48	45	44	50	46	23	38	35	14	10	18	34.7
	Minimum	35	29	31	32	27	26	24	24	5	2	4	11	14	12	6	8	11	22	28	37	42	26	19	42	21	5	8	14	2	13	4	17.4
New Cumberland	Maximum	45	42	47	42	37	33	36	36	22	5	14	25	26	31	20	28	31	40	40	47	45	37	39	48	34	23	33	34	15	14	14	31.7
	Minimum	32	24	25	31	25	24	22	20	7	6	3	2	4	3	4	0	0	3	22	37	36	24	12	24	2	0	3	10	2	15	4	11.0
New Martinsville	Maximum	47	42	53	47	38	40	38	36	28	10	14	31	28	28	23	32	35	44	41	50	46	40	40	51	50	36	38	35	16	18	16	35.2
	Minimum	38	28	30	33	32	36	26	26	1	2	10	3	4	12	1	8	4	6	21	32	29	25	18	32	24	10	9	12	2	11	6	15.3
Parkersburg	Maximum	46	44	52	49	41	41	32	38	11	10	14	24	27	18	18	30	35	43	43	52	48	35	46	51	48	25	37	34	11	11	18	33.0
	Minimum	33	29	34	36	27	26	23	9	1	2	5	6	6	11	2	13	8	9	29	37	35	26	22	44	21	13	16	11	1	10	9	16.7
Parsons	Maximum	33	41	47	47	37	47	25	40	25	20	32	34	25	21	32	45	45	37	46	39	48	39	48	45	45	30	42	31	16	13	21	35.5
	Minimum	30	21	24	32	25	20	17	17	2	11	7	1	11	3	4	5	1	9	18	17	17	10	30	38	18	7	7	15	9	26	4	10.3
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum	40	51	48	42	38	49	31	31	22	15	23	38	29	27	28	29	46	58	52	52	45	37	42	45	42	32	45	28	12	12	18	35.7
	Minimum	32	22	30	30	22	19	17	10	6	7	16	8	6	6	5	9	9	11	21	28	27	18	16	35	20	4	8	11	10	20	2	14.7
Terra Alta	Maximum	41	37	44	44	31	37	32	31	22	16	12	18	30	22	14	21	35	34	44	41	46	38	37	45	41	24	28	28	9	5	12	29.5
	Minimum	28	25	27	28	25	21	20	17	6	7	8	6	9	5	3	4	5	16	16	31	33	15	10	31	24	0	10	9	7	18	4	11.9
Wellsburg	Maximum																																
	Minimum																																
Weston	Maximum	48	46	51	50	40	42	38	45	40	14	18	34	32	27	23	33	45	53	43	48	49	47	44	51	47	47	40	36	20	12	19	37.5
	Minimum	40	26	30	36	32	22	26	25	1	0	7	6	4	12	8	13	11	9	19	28	40	29	18	38	37	13	11	20	4	20	3	17.2
Wheeling §	Maximum	43	47	49	41	39	38	39	36	12	10	18	30	37	20	20	30	24	36	42	49	46	35	47	50	30	28	43	31	12	12	20	32.3
	Minimum	38	30	30	35	30	26	25	29	3	4	5	5	1	6	5	5	7	6	8	36	32	27	13	29	29	9	7	14	6	9	9	13.5
Southern Division.																																	
Beckley	Maximum								26	26	21	28	28	20	23	32	36	28	28	59	58	60	60	39	59	32	32	48	49	16	8	24	35.0
	Minimum	27	29	33	38	22	22	21	1	2	7	9	6	3	2	18	7	7	16	10	20	30	18	31	32	9	6	17	16	2	20	1	13.6
Bluefield	Maximum	45	50	56	51	40	52	51	47	30	14	19	30	30	24	25	35	33	37	45	55	56	50	45	55		35	32	32	29	4	15	37.4
	Minimum	36	33	32	36	28	25	26	26	2	3	2	14	13	6	7	13	11	18	15	25	28	30	20	35		16	14	20	2	25	2	16.4
Charleston	Maximum	56	51	52	50	48	49	48	44	43	41	39	38	38	37	35	37	43	45	47	54	51	62	65	60	58	53	52	51	48	45	42	47.8
	Minimum	43	40	31	28	30	25	23	27	1	0	2	10	11	10	8	11	11	14	17	26	28	30	25	30	15	13	13	29	8	17	7	17.1
Elkhorn	Maximum	50	50	57	55	38	43	41	37	25	16	22	29	31	26	22	32	39	39	46	50	51	49	46	49	47	42	39	31	31	14	14	37.2
	Minimum	41	30	36	38	30	27	28	25	0	0	9	10	15	9	10	14	13	25	21	26	28	32	23	36	37	15	17	24	6	17	3	19.4
Green Sulphur Spgs.	Maximum	46	50	49	50	44	40	38	37	30	19	24	36	26	25	28	36	42	38	45	49	45	42	41	49	40	38	29	32	30	16	20	36.6
	Minimum	28	27	30	39	26	24	22	28	4	2	4	14	16	14	14	18	6	10	10	20	26	30	18	32	31	17	10	20	8	22	5	16.5
Hinton §	Maximum	54	53	50	45	41	42	36	37	19	14	20	26	26	20	22	31	34	33	39	41	45	40	40	46	41	32	28	22	9	10	18	32.7
	Minimum	38	32	32	34	30	23	24	26	2	0	4	4	2	5	3	10	7	7	10	10	19	21	17	18	32	14	10	12	7	13	13	13.3
Holcomb §.	Maximum	41	50	47	38	47	30	33	40	20	12	26	35	24	16	28	37	47	49	50	53	48	48	46	49	36	34	35	30	10	15	21	35.0
	Minimum	37	25	25	28	29	27	19	21	2	4	11	6	5	9	3	6	8	8	14	17	25	21	20	17	24	9	8	20	0	22	5	12.0
Huntington §	Maximum	48	53	58	42	42	42	35	39	11	17	18	24	29	18	21	36	36	33	51	52	50	38	49	52	46	40	36	36	13	11	19	34.8
	Minimum	42	30	30	39	28	28	25	25	0	0	1	0	4	14	4	4	11	11	15	29	32	32	24	29	32	16	24	15	8	14	14	16.3
Lewisburg	Maximum	41	51	51	51	39	42	37	36	34	16	15	24	21	23	22	27	33	31	36	46	46	43	36	45	44	29	25	31	31	6	16	33.2
	Minimum	38	29	26	36	26	21	20	23	2	2	4	9	7	3	7	3	10	1	7	3	12	18	30	18	29	28	5	1	9	1	37	11.0
Marlinton	Maximum	38	44	44	42	34	36	30	32	20	10	11	22	20	20	18	25	32	34	36	42	44	36	36	42	36	28	22	28	20	8	12	29.1
	Minimum	32	24	20	32	18	16	20	20	4	6	20	4	14	4	6	8	1	4	2	12	24	20	6	16	22	0	4	10	2	24	0	6.9
Point Pleasant	Maximum	51	50	57	50	45	45	41	38	23	13	16	27	28	27	23	32	40	48	45	56	50	44	45	53	49	31	39	37	20	15	18	37.3
	Minimum	38	22	28	33	19	18	20	23	3	5	10	1	1	8	9	9	0	4	24	26	27	21	17	39	22	8	11	12	4	19	3	12.7
Powellton	Maximum																																
	Minimum																																
Robertsburg§	Maximum	49	52	58	43	45	38	40		16	13	19	32	29	17	24	33	39	46	44	55	49	40	47	50	35	29	41	36	15	16	21	35.7
	Minimum	41	26	28	38	22	25	25	2		2	2	7	3	0	4	4	4	0	7	24	30	29	18	24	32	8	9	13	7	22	22	12.0
Ryan	Maximum	55	51	60	52	47	49	38	43	26	20	21	19	29	27	30	37	38	48	44	52	45	44	46	45	39	33	37	35	24	26	24	38.2
	Minimum	33	24	29	38	21	18	25	26	10	2	12	0	2	13	7	17	3	5	17	20	28	6	16	39	27	5	8	3	6	27	4	12.6
Sutton	Maximum	47	50	51	51	46	45	43	44	44	18	18	35	35	32	22	23	37	40	40	43	48	48	43	48	48	28	38	38	37	37	31	39.0
	Minimum	40	23	24	27	26	20	22	25	8	10	12	5	8	12	4	17	8	7	15	22	24	32	30	33	27	11	11	24	4	21	7	14.7
Union §	Maximum	55	57	60	62	40	42	37	30	14	11	15	23	22	24	22	27	33	31	33	36	52		40	55	45	42	30	22	12	10		33.8
	Minimum	33	29	30	29	32	23	23	25	1	3	8	7	10	8	7	12	2	7	6	7	15	20		15	37	12	1	12	6	34	28	10.7
White Sulphur Spgs.	Maximum	62	63	67	53	44	43	35	36	34	16	20	27	23	28	26	30	39	37	44	51	48	43	40	51	45	39	32	33	32	10	18	37.7
	Minimum	36	35	30	38	23	19	23	24	0	2	10	6	6	8	0	12	2	7	3	12	23	29	28	19	23	12	1	9	8	34	5	11.8
Williamson §	Maximum	49	55	51	41	42	45	40	41	21	13	23	30	30	19	29	38	41	45	44	51	44	43	47	57	39	31	37	35	10	14	24	36.4
	Minimum	42	32	32	40	32	28	28	30	3	2	2	3	5	12	12	13	15	15	20	26	26	30	24	25	38	16	16	20	8	13	13	18.4

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

U. S. DEPARTMENT OF AGRICULTURE,

WEATHER BUREAU.

C. F. MARVIN, Chief.

NOTES ON THE CLIMATE OF FRANCE AND BELGIUM.

By PRESTON C. DAY.

[*Advance sheets from* MONTHLY WEATHER REVIEW, October, 1917.]

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1917.

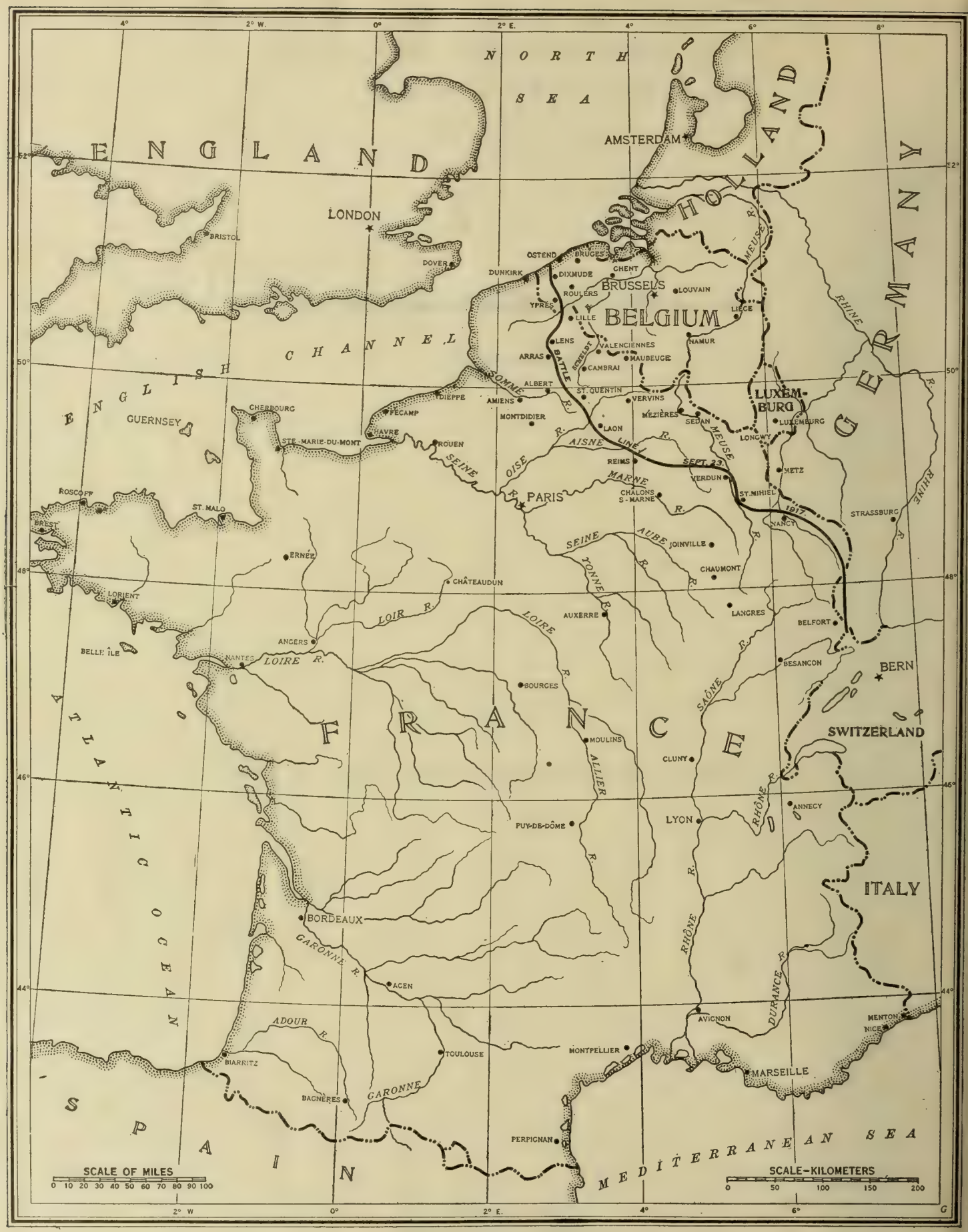


FIG. 1.—Map of France and Belgium, showing rivers, localities referred to in accompanying tables, and approximate battle line on September 23, 1917.

[Advance sheets from MONTHLY WEATHER REVIEW, October, 1917.]

NOTES ON THE CLIMATE OF FRANCE AND BELGIUM.

By PRESTON C. DAY, Climatologist and Chief of Division.

[Climatological Division, Weather Bureau, November 12, 1917.]

Introduction.

The present interest of the people of the United States in matters pertaining to Europe has extended to questions of climate and the probable effect of the weather upon the health and comfort of those who have been or who may be called for service in France and Belgium. Numerous inquiries relating to weather conditions usually experienced in those countries have been received, and it seems proper to present to the public at this time a description of their more important climatic features. As there is generally shown on the part of the inquirer a desire for comparisons between weather here and there, sufficient data have been included to permit of such comparisons being made.

Geographical position.—France and Belgium together occupy that portion of the western coast of Europe extending from north latitude 42° 20′ to 51° 20′, which corresponds nearly to the portion of the American coast lying between Boston and the northern end of Newfoundland. In longitude they extend from 4° 42′ west of Greenwich to 7° 30′ east. Their outlines and some of the more important topographic features, including river systems, and locations of various towns are shown on figure 1.

The geographical location of France and Belgium with respect to latitude and their areas as compared with the United States are shown on figure 2, where their outlines are superposed on a chart of the United States and portions of Canada. By referring to this chart it will be seen that in latitude these countries lie largely to the north of the United States. Marseille, the most southerly important city of France, is seen to be farther north than Boston, while Paris is nearly 500 miles farther north than Chicago. Brussels, in latitude 50° 51′, is more than 50 miles farther north than Winnipeg, Canada, or in the same latitude as the southern portion of Hudson Bay. The difference in longitude is such that local time at Paris is approximately five hours later than at New York, that is, when it is noon at New York it is



FIG. 2.—Map comparing the relative areas and geographic latitudes of France–Belgium and the United States of North America.

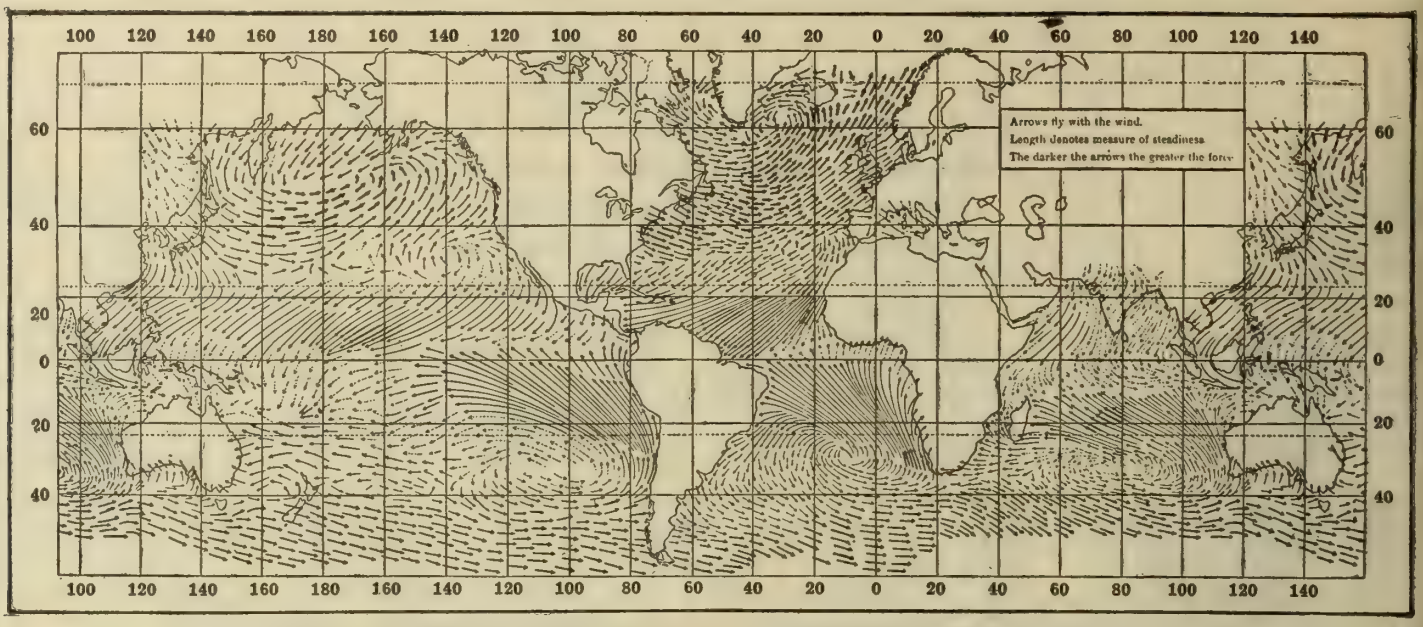


FIG. 3.—Chart of ocean winds in January and February, showing normal directions, relative velocities, and constancies. (Koeppen.)

already 5 p. m. at Paris; six hours later than at St. Louis; seven hours later than at Denver, and eight hours later than at San Francisco. Thus during the longer days of the year as the sun is setting on our western coast it is rising on the following day in eastern France.

Area and topography.—The area of France is slightly less than 210,000 square miles, that of Belgium is about 11,000 square miles, and the combined area of the two countries about equals that of the States along our Atlantic seaboard from North Carolina to New England, inclusive.

The northwestern half of France and practically the whole of Belgium consists principally of low plains and shallow, open valleys, gradually rising from sea level on the west coast toward the interior, with few elevations exceeding 1,000 feet. The eastern and southeastern portions of France are considerably broken, the land rising in the north portion toward the Ardennes, a series of hills and low mountains in southeastern Belgium and northeastern France, with occasional elevations of 2,000 feet or more near the German (Alsatian) frontier. Farther south the Vosges, forming a portion of the boundary between France and Germany, rise to elevations of 5,000 feet or more, while along the borders of Switzerland and Italy the Jura and outlying peaks of the Alps attain elevations somewhat greater. Along the border between France and Spain some of the higher peaks of the Pyrenees reach elevations of more than 10,000 feet.

Important rivers, a number of which are navigable for considerable distances, drain both France and Belgium, which, together with the extensive systems of connecting canals, afford water transportation to large areas of the inland region.

Climate.

France and Belgium, located as they are, in the region of the eastward drift of the atmosphere, afford in their

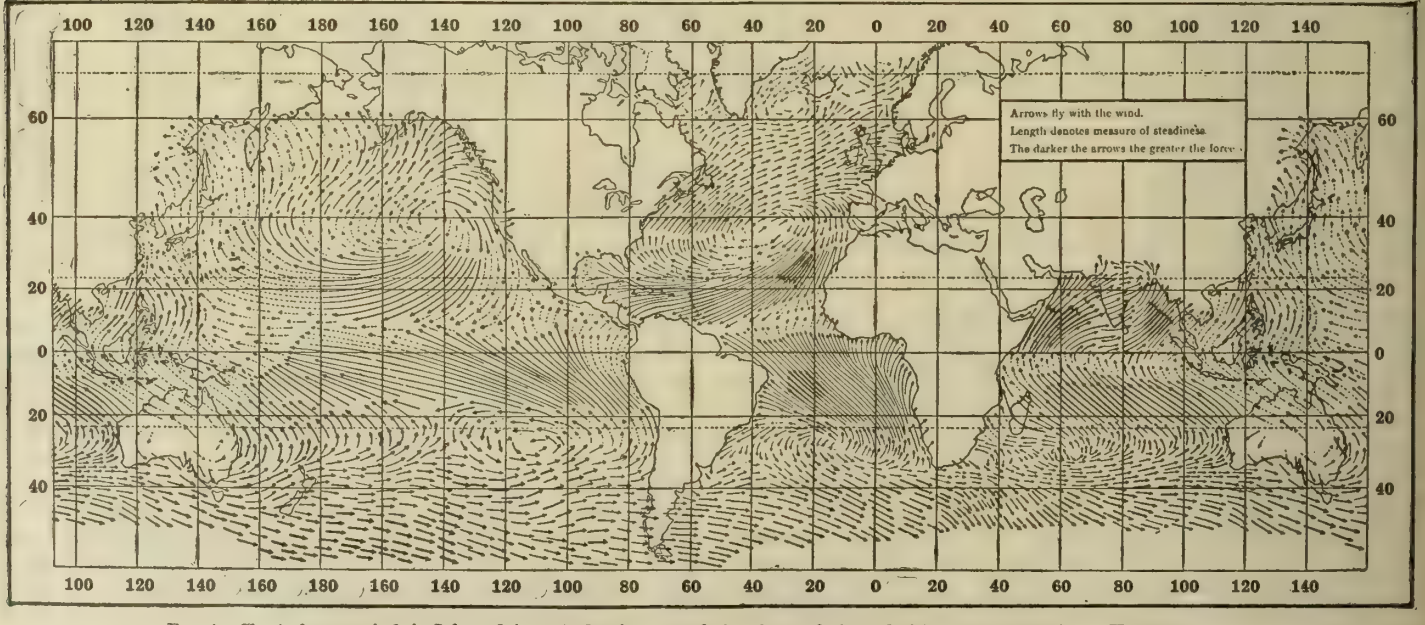


FIG. 4.—Chart of ocean winds in July and August, showing normal directions, relative velocities, and constancies. (Koeppen.)

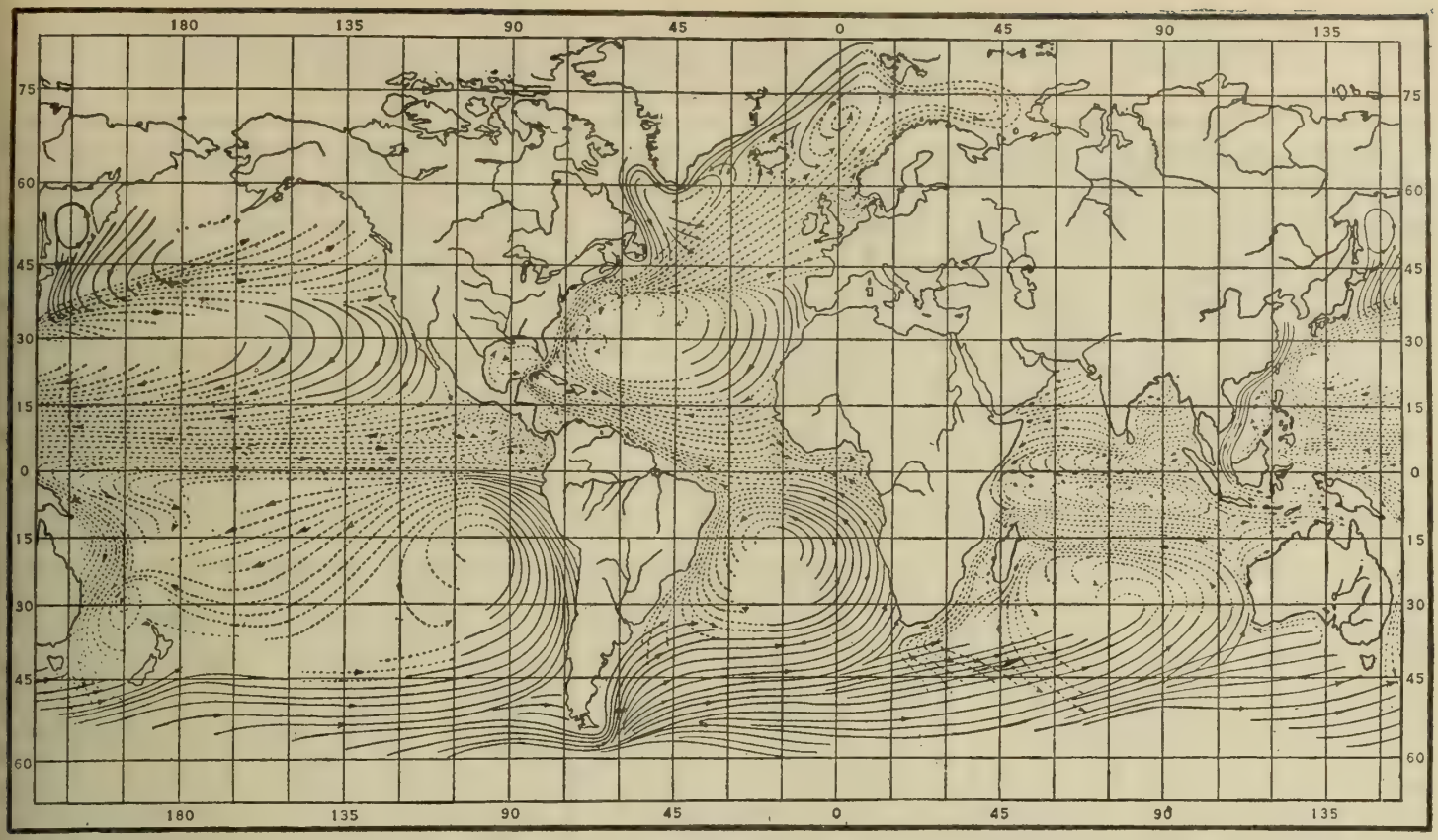


FIG. 5.—Chart of average annual ocean currents. Warm currents indicated by dotted arrows; cooler currents by continuous arrows.

climate an excellent example of the modifying influences exerted upon land areas by the proximity of large bodies of water to their western borders. Water surfaces warm slowly under the direct rays of the sun and also cool slowly in the absence of direct solar radiation, resulting in a comparatively uniform temperature condition. This marine influence is felt in varying degrees over land surfaces adjacent to large bodies of water, its potency and distance reached inland depending on the direction and strength of the surface drift of the atmosphere and the topography of the land. Both the situation and topographic features of France and Belgium are favorable for the marine influence to be felt in a large measure over the greater portion of both countries, the prevailing winds (see figs. 3 and 4) being from off the ocean and with no mountain barriers materially to obstruct their passage to the interior.

The general drift of ocean waters likewise contributes materially to the modification of climate over the adjacent land areas. There are a number of extensive ocean currents which carry large amounts of water for long distances. When these currents have poleward directions they carry relatively warm water into colder regions, and when their flow is equatorward the reverse is true. The great Atlantic Drift, originating in the so-called Gulf Stream, transports relatively warm water from the Gulf of Mexico and adjacent regions into the northeastern portion of the Atlantic Ocean, and the normal westerly winds blowing over these waters carry their warmth to the adjacent land, thus tending to modify further the climate of western Europe. It is of interest to note that while Brest, on the western coast of France, has about the same latitude as Devils Lake, N. Dak., the average January temperature at Brest under these marine influences is 44° F., while at Devils Lake (under continental influences) it is about 0° F. Greater variations are shown in the extremes, where for the vicinity of Brest the lowest observed winter temperature probably does not reach 0° F., while readings of nearly 60 degrees below 0° F. have been observed in the vicinity of Devils Lake. On the other hand, owing to the less rapid cooling of the ocean waters as compared with the land, the ocean winds of summer are cooler than those from the land, and in July the average temperature of Brest is only 64° F., while at Devils Lake it is about 68°.

The general surface drift of the atmosphere over the several oceans in Winter and in Summer is shown by figures 3 and 4, and figure 5 shows broadly the movement of ocean waters. It will be noted from these charts that in the North Atlantic Ocean between Europe and the United States the normal direction of movement for both air and ocean water is northeastward, or toward the European coast.

Temperature.—The outstanding features of the temperature of the countries of western Europe are the comparatively warm winters for such high latitudes, and the relatively cool summers. Along the coasts of northern France and of Belgium temperatures are very similar to those experienced on our own northern Pacific coast, the average monthly temperatures at Dunkirk, France, and at Seattle, Wash., being identical for nearly half the months of the year and differing only slightly for the other months. Farther south over the Atlantic coast districts of France the temperatures throughout the year resemble those of the coasts of southern Oregon and northern California, and during the winter months the averages are not materially different from those of the Carolina and Georgia coasts, but in the latter districts temperatures have a greater variation from day to day and the extremes are decidedly more pronounced. The

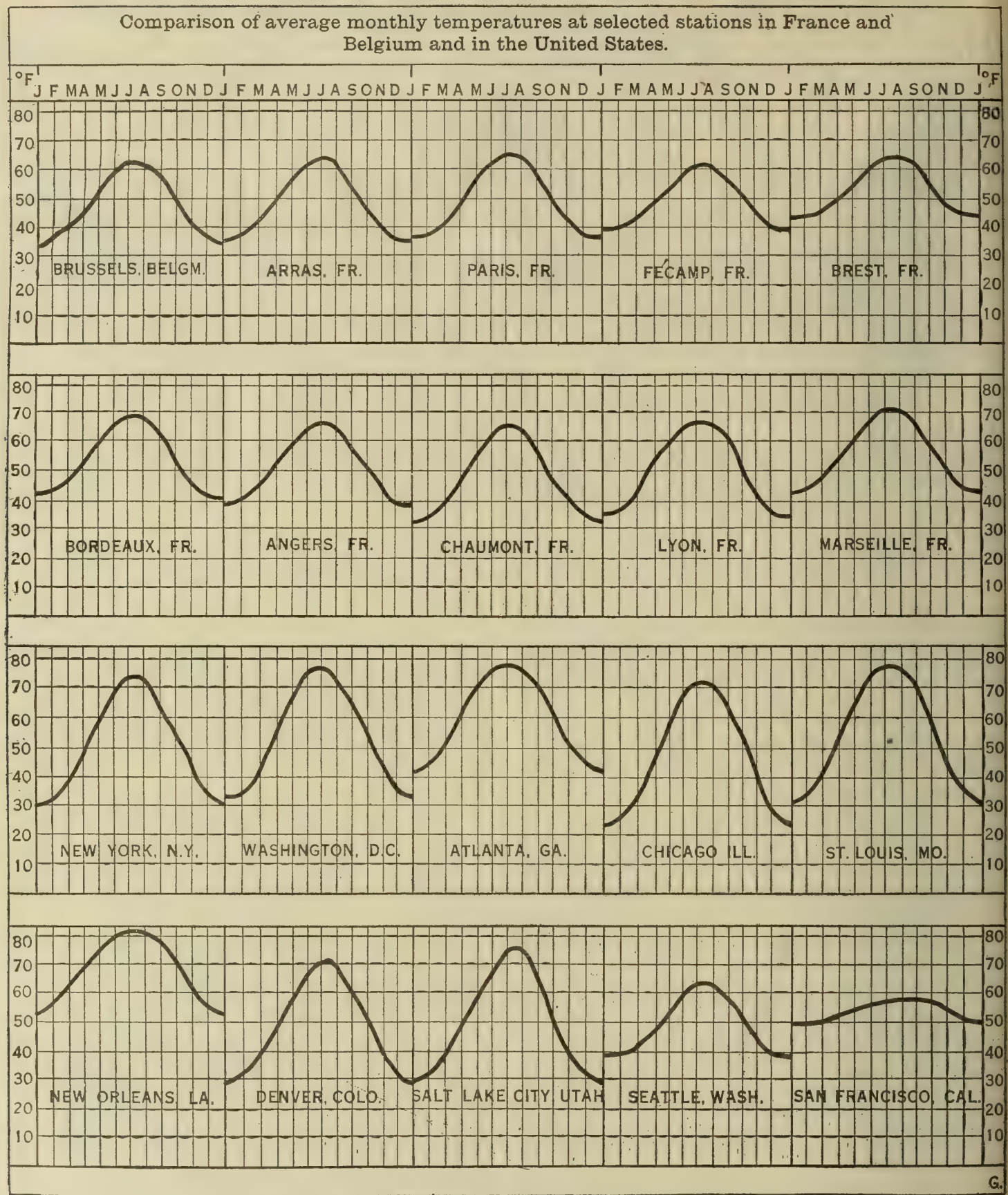


FIG. 6.—Synoptic chart of annual temperature marches at selected stations in France, Belgium, and the United States.

absence of mountain barriers affords the prevailing ocean winds free passage from the coast districts to the interior of these countries; the modifying influences of these ocean winds thus extend far inland, and we find at Paris, for instance, temperature conditions not materially different from those near the coast, nearly 200 miles to the westward.[1]

Over the more eastern districts, where the broken topography and greater elevations interfere with the course of the westerly winds, they no longer exert the strong influence apparent at the lower elevations to the westward, and here we find temperatures showing much wider ranges and conforming more to continental conditions, although the extremes are still far less pronounced than would be expected, considering only the high latitude of the country. Figure 6 presents annual temperature curves for both continents and helps this comparison.

Table 1 shows for a considerable number of stations distributed throughout France and Belgium the average monthly and average annual temperatures, while figure 6 shows graphically similar values for selected points in those countries and in the United States, from which comparisons between different portions of the respective countries can be made. It will be noted by referring to the table and graphs that the chief characteristic of the temperature in France and Belgium is uniformity throughout the year, or the absence of extremely cold weather in winter and extended hot weather in summer. The average temperature for the coldest month, January, in the interior of northern France is a few degrees above freezing, corresponding closely to that experienced at about the latitude of southern Missouri and central Virginia in our own country. However, at the latitude named in the United States the fluctuations in temperature from day to day are usually much greater (except on the Pacific coast) during the winter season than in northern France, and the minima usually go considerably lower.

Winter in northern France is not severe from the standpoint of low temperatures, but there is a constancy of moderately cold weather which is not usually experienced in the United States. Table 2 shows for selected stations in France and in the United States the average daily maximum and minimum temperatures, and Table 3 shows for a number of selected points in France the highest and lowest temperatures of record, while Tables 4 and 5 show the average number of days with minimum temperature as low as or lower than 32° F., and the average number with the temperature continuously below 32° F. throughout the day. From Tables 4 and 5 it will be seen that at Arras near the northern end of the battle line (fig. 1) in January about two-thirds of the days on the average have minimum temperatures as low as freezing or lower and, as a rule, about five days of that month have temperatures continuously below freezing. On the Mediterranean coast the winters are delightful, the average January temperature being about 45° F. and freezing weather infrequent. Rather low temperatures sometimes occur in northern France, but such extremely cold weather as is occasionally experienced in the interior and northern portions of the United States is unknown. The coldest weather of record in that region ranges from about 0° F. to −10° F. In the United States "zero weather" has occurred on the central Gulf coast and −10° F. in the northern portions of the central Gulf States, while along the north-central border of the United States, which corresponds closely with the latitude of France (fig. 2), temperatures from 50 to 60 degrees below 0° F. are of record, and the average of the lowest winter temperature is about −35° F.

Summer in northern France and Belgium is cool, as compared with most of the United States, the average temperature for July and August, the warmest months, being 63° to 65°, even lower than along our northern border. Moderately hot weather sometimes occurs, but extremely high temperatures, such as are occasionally experienced in much of this country, are unknown in France and Belgium. It will be noted from Table 3 that in most of northern France and in Belgium temperatures as high as 100° F. have never been reported, while in the United States 100° to 110° have occurred generally, except in the higher mountain districts and along portions of the coasts. The daily maximum temperatures in northern France and Belgium in midsummer are usually less than 80° and the minimum less than 60° F.

Precipitation.—Table 6 shows for a number of well-distributed stations in France and Belgium, the average monthly and annual precipitation. At the lower elevations the annual precipitation ranges between 20 and 30 inches, but at the higher altitudes, especially at the western extremity of the Pyrenees at the south of France and in the Vosges in eastern France the annual precipitation reaches 60 to 70 inches. The rainfall is rather equally distributed throughout the year, but the maximum amounts occur in the Fall and early Winter and the minimum in the spring months. On the Mediterranean coast rainfall is comparatively heavy during the winter season, but during the summer it is usually very light.

Figure 7 shows graphically for a number of selected stations in France and the United States the average monthly precipitation, permitting comparisons between different portions of the respective countries. Not considering the higher mountains, rainfall in the eastern half of the United States, especially in the South, is much greater than in France and Belgium. Compared with Paris, the average annual rainfall at Chicago is one and one-half times as large; at New York, more than twice as large, and at New Orleans nearly three times as large.

The outstanding feature of rainfall in France and Belgium, when the relatively small totals as compared with the eastern half of the United States are considered, is the frequency of its occurrence. For example, while the average annual rainfall at New Orleans is nearly three times as much as that of Paris, Table 7 shows that rain falls with considerably greater frequency at Paris than at New Orleans. Rainfalls of moderate amounts, 0.25 to 1.00 inch in 24 hours, occur with about as great frequency in France and Belgium as in much of the United States (Table 8), but heavier falls, more than 1.00 inch in 24 hours, rarely occur (Table 9). It will be noted that at Arras, in northern France, only one day had rainfall greater than 1.00 inch during the entire 5-year period from 1907 to 1911, inclusive, while at New Orleans for the same period, amounts of this magnitude were recorded on 63 days.

Snowfall.—In Belgium and over the lowlands of northern France snow is fairly frequent and may be expected from November to April, inclusive, although on account of the rather light character of the precipitation and the moderate temperatures, it rarely attains any considerable depth on the ground. At the higher

[1] A crude comparison between the severity of the winters at Paris and Washington D. C., was published in the MONTHLY WEATHER REVIEW, November, 1914, 42:626-9. —C. A., jr.

elevations of eastern and southeastern France, particularly in the mountains bordering on Germany and Switzerland where the winters are long and cold, snowfall is more frequent and much heavier and in some places accumulates to considerable depths. At Brussels snow usually occurs on about 25 days during the year, in the vicinity of Paris snow may be expected on about 15 days, while along the English Channel it probably occurs, as a rule, on less than 10 days.

The average number of days with snowfall for each of the winter months and the year at a few selected points in Belgium and northern France, is shown in Table 12, and there compared with points in the United States.

Cloudiness.—The average cloudiness for each month of the year is given for selected stations in France and Belgium and in the United States in Table 11, from which comparisons as to this phase of the weather can be made. The amount of cloudy weather in France during the warm season of the year does not differ materially from that in much of our own country, but in winter much more cloudy weather is experienced than in most of the United States, this being especially true in northern France and in Belgium. It will be noted from the records for Nice, Marseille, and Montpellier, that there is abundant sunshine in the Mediterranean coast districts at all seasons of the year.

SUMMARY.

From the standpoint of bodily comfort, the climate of northern France and Belgium may be briefly summarized as follows: The winter weather is rather rigorous and unpleasant, due to the persistence of comparatively low temperatures, much cloudiness and frequent rain and snow. The winds blow mostly from the west or southwest and are frequently damp and chilly, the relative humidity being rather high. The winter nights are long and the days correspondingly short. In the extreme northern portion of France, near the present battle line, the sun sets during the latter half of December a few minutes before 4 p. m., and rises about 8 a. m., making the nights, sunset to sunrise, about 16 hours long.

With the transition from Winter into Spring, the rapid warming up familiar to residents in most sections of the United States, is not so noticeable in France and Belgium, the average temperature for March being only 2 to 4 degrees (F.) higher than for February. April and May are moderately cool and not unpleasant, the length of the day increases much more rapidly than in most sections of the United States, and there is a correspondingly large increase in the amount of sunshine, while rainfall is comparatively light, although occurring rather frequently.

The Summers are pleasant as compared with much of the United States, the day temperatures being mostly moderate and the nights cool. Occasionally hot weather is experienced, but the heat is not excessive and the heated periods are usually of short duration. During the latter part of June the days in northern France and Belgium are more than 16 hours long, the sun rising a little earlier than 4 a. m. and setting after 8 p. m.

Fall also is usually pleasant, especially during September and October, the temperature during these months being, as a rule, considerably higher than for the corresponding spring months. With the advent of Fall the rainfall usually becomes heavier, resulting more from greater intensity of falls than from increased frequency. This usually is the season of maximum rainfall.

TABLE 1.—*Average monthly temperatures (°F.) for 39 localities in France and 4 in Belgium.*

[For locations see map, figure 1, p. [2].]

Station and dates.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.
Dunkirk (1881-1900)	39	40	42	47	52	58	63	63	60	52	44	40	50
Lille (1851-1900)	36	38	41	48	54	60	63	63	58	50	42	37	49
Arras (1876-1900)	35	37	41	48	54	60	63	63	57	49	41	36	49
Mézières (1883-1900)	35	37	41	49	55	62	65	64	58	50	41	36	49
Paris (1871-1900)	36	39	43	50	56	62	65	64	59	50	43	37	50
Rouen (1851-1900)	37	39	42	49	55	61	64	63	59	51	43	38	50
Dieppe (1873-1882)	37	39	41	47	51	57	60	61	57	50	43	39	49
Fécamp (1853-1882)	39	40	43	48	52	58	61	62	58	52	45	40	50
Ste. Marie-du-Mont (1871-1900)	40	41	43	48	53	58	62	62	58	52	46	41	50
Guernsey (1851-1900)	43	43	43	47	51	56	59	59	58	53	48	45	50
Saint Malo (1871-1900)	41	42	45	50	54	59	62	62	59	53	46	42	51
Roscoff (1891-1900)	45	45	46	50	54	58	61	62	59	55	49	46	52
Brest (1866-1900)	44	44	46	51	55	60	64	64	61	54	48	45	53
Ernée (1881-1895)	38	40	43	49	54	60	63	62	58	50	43	38	50
Lorient (1862-1900)	43	44	46	51	56	62	65	65	61	54	48	44	53
Belle Île (1886-1900)	43	43	45	50	55	60	63	64	61	55	49	45	53
Nantes (1856-1900)	40	42	45	51	56	62	66	65	60	53	45	41	52
Angers (1851-1900)	39	41	45	51	57	63	66	66	60	52	45	39	52
Châteaudun (1891-1900)	36	38	42	50	56	62	66	65	59	50	42	36	55
Auxerre (1886-1900)	36	39	43	51	56	64	67	66	60	51	43	36	10
Chaumont (1881-1900)	33	36	41	49	55	62	65	64	58	49	41	34	49
Langres (1891-1900)	32	35	39	48	54	61	64	63	57	48	39	32	48
Besançon (1891-1900)	33	37	42	50	56	63	66	65	60	50	41	34	50
Moulins (1881-1890)	36	38	43	51	57	63	67	66	60	51	42	36	51
Cluny (1881-1890)	35	38	43	51	56	63	67	66	60	51	43	36	51
Annecy (1876-1900)	31	35	41	50	57	64	67	66	60	50	40	32	49
Lyon (1851-1900)	35	39	44	52	58	64	68	67	61	52	42	35	51
Puy-de-Dôme (1881-1900)	28	29	30	35	41	48	52	52	48	40	34	29	39
Menton (1877-1886)	45	46	49	55	61	68	73	73	69	61	52	47	58
Nice (1884-1900)	44	45	48	53	59	66	72	71	66	58	50	45	56
Marseille (1851-1900)	43	45	49	55	61	68	72	71	65	58	50	44	57
Avignon (1872-1884)	39	44	49	56	63	70	75	73	66	57	47	40	57
Montpellier (1851-1900)	41	44	48	54	61	68	73	72	65	57	48	42	56
Perpignan (1851-1900)	44	46	50	56	61	68	73	72	66	58	51	45	58
Toulouse (1851-1900)	40	42	46	52	58	65	73	72	65	57	48	42	56
Agen (1881-1900)	40	42	46	53	58	65	69	69	64	55	46	40	54
Bagnères (1891-1900)	38	42	44	49	54	60	64	64	60	51	44	39	51
Biarritz (1886-1900)	46	48	50	54	59	64	69	69	65	59	51	47	57
Bordeaux (1851-1900)	41	43	47	53	58	64	68	68	64	55	47	41	54
Belgium:													
Ostend (?)	36	38	42	47	53	59	63	63	60	51	44	39	50
Brussells (1851-1900)	34	36	40	47	53	60	63	62	58	50	41	36	48
Namur (1833-1862)	a35	a36	a40	a48	a56	a64	a66	a65	a57	a50	a40	a37	a50
Liége (1833-1862)	a25	a37	a41	a49	a57	a64	a67	a66	a59	a52	a41	a37	a50

a These averages are for 9 a. m. only.

AUTHORITIES:
For French stations: *Bigourdan*—Climat de la France. Paris, 1916.
For Belgian stations: Ostend from *Blanchard*—La Flandre. Paris, 1906.
Brussels from *Hann*—Handbuch der Klimatologie, 3d ed., v. 3. Stuttgart, 1911. p. 192.
Namur and Liége from *Quetelet*—Météorologie de la Belgique. Bruxelles, 1867.

TABLE 2.—*Average daily maximum and minimum temperatures at selected stations in France, Belgium, and the United States.*

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.
Fécamp, France (26 years):[1]												
Maximum	43	46	49	55	60	66	69	69	66	58	49	45
Minimum	34	37	38	42	46	51	55	55	52	47	40	36
Sèvres, France, (near Paris, 10 years):[2]												
Maximum	40	44	50	61	66	73	77	75	70	58	49	42
Minimum	32	32	35	41	45	52	55	55	51	43	38	34
Marseille, France (49 years):[2]												
Maximum	52	55	59	65	71	78	83	82	77	68	59	53
Minimum	36	38	41	46	51	57	61	60	56	50	43	38
Brussels, Belgium (12 years):[3]												
Maximum	41	45	48	60	65	72	74	72	67	58	48	42
Minimum	33	36	37	42	48	55	58	58	53	46	38	34
New York, N. Y.:												
Maximum	37	38	45	57	68	77	82	80	74	63	51	41
Minimum	24	24	31	41	52	61	67	66	60	49	38	28
Atlanta, Ga.:												
Maximum	50	53	62	70	79	85	87	85	81	71	61	52
Minimum	35	37	44	51	60	67	70	69	64	53	44	36
Chicago, Ill.:												
Maximum	37	33	42	54	64	74	80	78	72	60	46	36
Minimum	17	18	28	39	49	59	65	65	58	46	33	23
New Orleans, La.:												
Maximum	62	64	71	76	83	88	89	89	86	78	69	63
Minimum	47	49	56	61	68	74	76	75	72	63	54	48
Denver, Colo.:												
Maximum	42	44	52	60	69	80	86	85	77	65	52	45
Minimum	17	20	27	35	44	52	58	57	48	37	26	20
San Francisco, Cal.:												
Maximum	55	58	60	62	63	65	65	65	68	67	62	56
Minimum	45	47	48	49	50	52	52	53	54	54	51	46

[1] From Annales du Bureau Central Météorologique de France, 1885.
[2] From Annales du Bureau Central Météorologique de France.
[3] From *Académie Royal de Belgique*, Observations des Phénoménes Périodiques, 1859-1870.

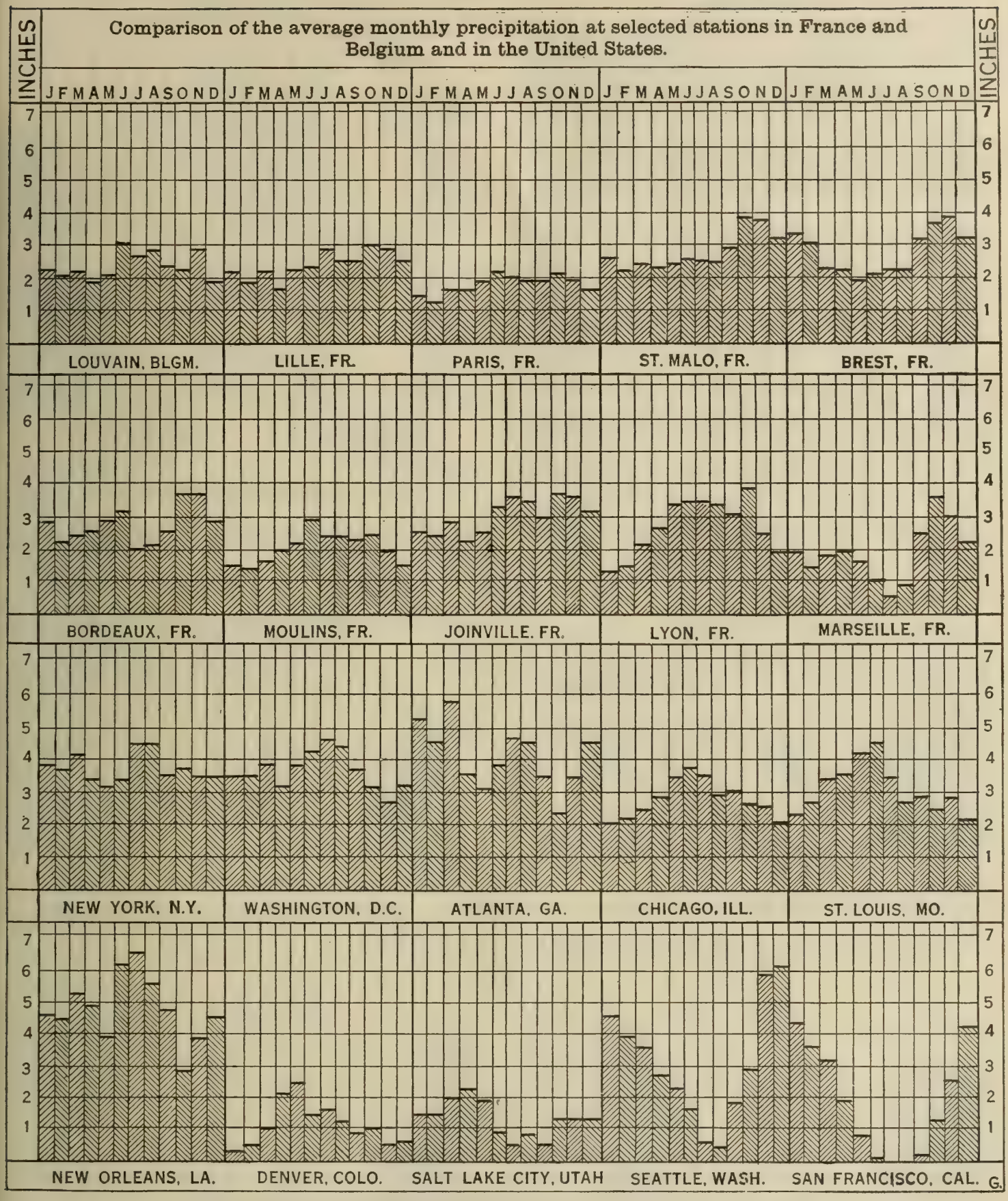


Fig. 7.—Synoptic chart of annual precipitation marches at selected stations in France, Belgium, and the United States.

TABLE 3.—*Highest and lowest temperatures ever recorded at selected stations in France.*

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Dunkirk (1881–1900):	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.	° F.
Highest	56	65	71	75	87	88	89	97	91	77	70	59	97
Lowest	− 1	10	21	32	35	42	45	49	43	30	16	8	− 1
Lille (1851–1900):													
Highest	61	63	72	81	90	96	95	95	91	80	66	.63	96
Lowest	0	5	18	27	32	37	39	45	37	22	16	− 2	− 2
Arras (1881–1900):													
Highest	56	64	72	79	91	95	99	96	92	80	68	60	99
Lowest	3	− 4	10	26	28	35	41	36	30	26	6	− 2	− 4
Paris (1851–1900):													
Highest	60	67	75	83	89	95	101	97	97	82	70	62	101
Lowest	7	7	16	26	32	38	43	43	35	26	7	−11	−11
Guernsey (1851–1900):													
Highest	57	59	66	76	77	81	85	87	83	73	66	60	87
Lowest	17	22	27	30	36	41	48	47	40	33	26	24	17
Nantes (1881–1900):													
Highest	64	64	71	83	86	94	102	99	98	83	71	62	102
Lowest	12	5	20	27	30	36	42	39	32	22	18	10	5
Chaumont (1876–1900):													
Highest	61	66	79	83	92	96	104	104	98	80	76	60	104
Lowest	−16	1	2	20	28	34	40	38	29	18	6	− 4	−16
Lyon (1851–1900):													
Highest	66	70	79	83	93	95	101	97	95	82	70	64	101
Lowest	−13	10	4	25	29	36	42	43	32	20	14	− 8	−13
Montpellier(1851–1900):													
Highest	69	77	82	86	94	102	106	102	98	86	76	70	106
Lowest	3	12	14	26	32	39	43	43	35	21	16	3	3
Bordeaux (1881–1900):													
Highest	67	72	78	84	91	96	103	107	98	86	75	67	107
Lowest	3	17	16	29	35	41	47	47	38	37	16	16	3
Brussels, Belgium, (1851–1900):													
Highest	56	65	70	78	91	94	95	95	88	77	68	60	95
Lowest	− 4	2	14	28	31	40	44	45	37	26	11	2	− 4

AUTHORITY: Annales du Bureau Central Météorologique de France, 1904.

TABLE 4.—*Average number of days with a minimum temperature of 32° F. or lower at selected stations in France and the United States.*

Stations.	October.	November.	December.	January.	February.	March.	April.	Annual.
FRANCE.	das.	das.	das.	das.	das.	das.	das.	das.
Dunkirk (1881–1900)	0	3	8	10	8	5	0	34
Arras (1881–1900)	3	8	15	18	16	12	4	76
Paris (1874–1900)	0	5	11	11	10	6	0	43
Fécamp (1871–1900)	0	4	8	10	7	4	1	34
St. Marie - du - Mont (1870–1900)	1	4	11	11	8	7	2	44
Roscoff (1891–1900)	0	0	4	4	3	1	0	12
Nantes (1881–1900)	2	5	11	12	12	8	2	52
Angers (1872–1900)	1	4	11	12	9	5	1	43
Langres (1889–1900)	2	9	20	20	17	12	4	84
Besançon (1885–1900)	3	9	20	22	18	13	3	88
Lyon (1881–1900)	1	6	17	20	15	10	2	71
Nice (1885–1900)	0	0	3	5	4	2	0	14
Marseille (1867–1900)	0	2	8	9	5	3	0	27
Montpellier (1881–1900)	0	2	12	14	10	5	0	43
Perpignan (1881–1900)	0	1	5	8	4	2	0	20
Toulouse (1881–1900)	0	3	11	12	8	5	0	39
Bordeaux (1881–1900)	1	4	9	11	8	5	0	38

Stations.	Annual.
UNITED STATES.	das
Boston, Mass	105
Washington, D. C	89
Cincinnati, Ohio	83
Chicago, Ill	111
Kansas City, Mo	97
Minneapolis, Minn	148
Bismarck, N. Dak	182
Denver, Colo	145
Salt Lake City, Utah	106
Helena, Mont	149
Seattle, Wash	22
San Francisco, Cal	0
Los Angeles, Cal	1
Santa Fe, N. Mex	140
San Antonio, Tex	12
New Orleans, La	5
Atlanta, Ga	39

AUTHORITIES:
Annales du Bureau Central Météorologique de France, 1904.
U. S. Weather Bureau.—Climatological data for the States, 1895–1914.

TABLE 5.—*Average number of days with temperature continuously below freezing at selected stations in France and the United States.*

Stations.	Dec.	Jan.	Feb.	Annual.
FRANCE.	das.	das.	das.	das.
Dunkirk (1881–1900)	2	4	2	8
Arras (1881–1900)	4	5	2	11
Paris (1874–1900)	4	4	3	11
Roscoff (1891–1900)	0	0	1	1
Nantes (1881–1900)	2	2	1	5
Angers (1872–1900)	3	3	1	7
Langres (1889–1900)	11	11	6	28
Besançon (1885–1900)	6	8	3	17
Nice (1885–1900)	0	0	0	0
Marseille (1881–1900)	0	1	0	1
Montpellier (1881–1900)	0	0	0	0
Perpignan (1881–1900)	0	1	0	1
Toulouse (1881–1900)	1	2	0	3
Bordeaux (1881–1900)	1	2	0	3

Stations.	Annual.
UNITED STATES.	das.
Boston, Mass	29
Washington, D. C	15
St. Louis, Mo	80
Chicago, Ill	47
Minneapolis, Minn	77
Bismarck, N. Dak	89
Denver, Colo	23
Salt Lake City, Utah	22
Seattle, Wash	2
San Francisco, Cal	0
Santa Fe, N. Mex	14
San Antonio, Tex	1
New Orleans, La	0
Atlanta, Ga	3

AUTHORITIES:
Annales du Bureau Central Météorologique de France, 1904.
U. S. Weather Bureau—Climatological data for the States, 1895–1914.

TABLE 6.—*Average monthly and annual precipitation at selected stations in France and Belguim.*

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
France: [a]	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
Dunkirk	2.16	1.54	1.69	1.65	1.89	2.13	2.44	2.87	2.80	3.19	3.23	2.60	28.19
Lille	2.13	1.81	2.20	1.65	2.24	2.28	2.76	2.52	2.52	3.03	2.84	2.48	28.46
Albert	2.00	1.65	1.89	1.54	2.13	2.24	2.68	2.20	2.24	2.48	2.36	2.28	25.69
Paris	1.42	1.10	1.46	1.54	1.85	2.09	1.97	1.85	1.89	2.13	1.89	1.58	20.77
Rouen	2.17	1.69	2.05	1.77	2.09	2.28	2.68	2.48	2.52	2.76	2.68	2.56	27.73
St. Malo	2.72	2.13	2.32	2.21	2.28	2.52	2.44	2.28	2.91	3.78	3.66	3.23	32.48
Brest	3.31	2.95	2.24	2.13	1.93	2.01	2.09	2.13	3.07	3.58	3.78	3.23	32.45
Joinville	2.64	2.52	2.84	2.28	2.52	3.31	3.58	3.35	3.03	3.74	3.62	3.19	36.62
Besançon	3.11	2.60	3.39	3.50	3.90	4.41	3.66	3.50	3.42	4.61	4.09	3.43	43.62
Moulins	1.42	1.34	1.69	2.01	2.21	2.95	2.44	2.40	2.32	2.44	1.89	1.54	24.65
Lyon	1.34	1.42	2.13	2.64	3.27	3.35	3.42	3.27	2.95	3.78	2.56	1.93	32.06
Clermont Ferrand (near Puy-de-Dôme)	1.10	1.14	1.34	1.65	2.36	2.80	2.24	1.97	2.24	2.24	1.50	1.26	21.84
Marseille	1.93	1.38	1.81	2.05	1.57	1.02	0.51	0.99	2.40	3.47	2.99	2.20	22.32
Montpellier	3.46	2.52	2.40	2.52	2.28	1.46	0.91	2.09	2.76	4.53	3.07	2.91	30.91
Toulouse	1.81	1.57	1.97	2.80	2.80	3.07	1.69	1.93	2.28	2.60	1.93	1.65	26.22
Perpignan	1.85	1.65	1.93	1.97	1.93	1.38	0.87	0.91	1.77	2.60	1.38	1.50	19.74
Bagnères	3.66	3.66	4.72	5.12	4.80	5.05	2.42	2.72	3.27	4.20	4.45	3.19	47.32
Bordeaux	2.80	2.28	2.52	2.64	2.91	3.19	2.01	2.16	2.60	3.70	3.66	2.91	33.38
Belgium:													
Ostend [b]	2.05	1.57	1.89	1.54	1.93	1.93	2.24	2.91	2.76	2.56	3.11	2.28	26.77
Ghent [c]	2.28	1.89	2.01	1.93	2.40	2.72	3.11	3.19	2.83	3.39	2.95	2.76	31.46
Louvain [d]	2.28	2.09	2.20	1.93	2.13	3.15	2.68	2.83	2.36	2.28	2.84	1.89	28.66
Namur [e]	1.73	1.42	1.61	1.77	2.05	2.60	2.95	2.84	2.13	2.32	1.97	2.28	25.67
Liége [f]	2.09	1.93	1.97	2.05	2.36	2.79	2.91	3.19	2.48	2.72	2.48	2.52	29.49
Brussels [g]	2.20	1.85	1.97	1.85	2.28	2.52	2.87	3.03	2.56	2.80	2.52	2.40	28.85

[a] Period 1861–1890.
[b] Period 1861–1882.
[c] Period 1838–1874, 1878–1890.
[d] Period 1836–1848.
[e] Period 1849–1863, 1877–1890.
[f] Period 1847–1890.
[g] Period 1833–1896.

AUTHORITIES:
France—Annales du Bureau Central Météorologique de France, 1895.
Belgium—*Lancaster*—La Pluie en Belgique. Bruxelles, 1894.

TABLE 7.—*Average number of days with precipitation, trace or more, for the 5-year period 1907–1911, at selected stations in France and in the United States.*

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
France:	das.	das.	das.	das.	das.	das.	das.	das.	das.	das.	das.	das.	das.
Nancy	13	16	14	13	14	14	14	12	11	13	17	19	170
Paris	16	17	17	17	17	16	14	11	12	16	16	19	188
Arras	19	19	19	17	15	15	18	14	16	19	22	22	215
Brest	17	16	21	17	13	14	11	11	10	22	20	25	197
Marseille	6	5	12	10	10	8	3	3	8	13	10	13	101
United States:													
New York, N. Y	18	15	16	15	16	13	10	14	11	11	14	13	166
Washington, D. C	17	14	16	16	16	16	14	15	11	11	12	13	171
Atlanta, Ga	13	13	11	14	14	14	19	15	10	8	11	14	156
Chicago, Ill	19	15	14	18	16	13	13	12	13	11	15	19	178
St. Louis, Mo	14	14	11	15	15	15	13	11	12	11	9	14	154
New Orleans, La	10	10	8	12	13	16	20	21	17	9	9	14	159
Denver, Colo	6	8	8	11	16	13	17	17	12	9	7	9	133
Salt Lake City, Utah	14	13	14	12	12	11	9	11	9	9	8	14	136
Seattle, Wash	22	20	18	16	15	12	7	6	11	15	21	20	183
San Francisco, Cal	21	15	14	6	7	4	3	1	4	7	7	13	102

AUTHORITIES:
France—Annales du Bureau Central Météorologique de France, 1907–1911.
United States—*Weather Bureau* Climatological data for the States, 1907–1911.

TABLE 8.—*Average number of days with precipitation from 0.25 to 1.00 inch, for the 5-year period 1907–1911, at selected stations in France and the United States.*

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
France:	das.	das.	das.	das.	das.	das.	das.	das.	das.	das.	das.	das.	das.
Nancy	2	3	2	1	2	5	4	2	2	4	4	5	36
Paris	1	1	1	2	3	3	2	2	2	5	3	3	28
Arras	3	2	1	3	4	4	3	1	2	5	4	5	37
Brest	3	3	3	2	2	1	2	1	2	6	5	6	36
Marseille	1	1	2	3	1	1	0	1	2	4	3	3	22
United States:													
New York, N. Y	4	4	3	4	3	4	2	2	3	3	3	3	38
Washington, D. C	4	4	3	3	4	4	3	3	2	3	3	3	39
Atlanta, Ga	3	5	3	4	4	4	3	4	3	3	2	4	42
Chicago, Ill	3	3	3	4	6	4	3	2	2	2	3	3	38
St. Louis, Mo	2	3	3	4	4	4	2	3	1	2	4	2	37
New Orleans, La	2	3	1	2	3	4	4	4	5	2	2	3	35
Denver, Colo	0	0	0	1	3	1	2	3	1	0	1	1	13
Salt Lake City, Utah	2	3	3	2	4	1	0	2	2	3	2	2	26
Seattle, Wash	6	5	2	2	3	1	0	0	2	3	6	6	36
San Francisco, Cal	8	5	5	0	0	0	0	0	0	1	2	4	25

AUTHORITIES: Same as for Table 7 above.

TABLE 9.—*Total number of days with precipitation from 1.01 to 2.00 inches, and with more than 2.00 inches, for the 5-year period 1907–1911, at selected stations in France and in the United States.*

FRANCE.			UNITED STATES.		
Stations.	1.01 to 2.00 inches.	Over 2.00 inches.	Stations.	1.01 to 2.00 inches.	Over 2.00 inches.
	Days.	*Days.*		*Days.*	*Days.*
Nancy	5	0	New York, N. Y.	36	9
Paris	3	0	Washington, D. C.	39	6
Arras	1	0	Atlanta, Ga.	42	8
Brest	1	1	Chicago, Ill.	30	3
Marseille	9	4	St Louis, Mo.	47	4
			New Orleans, La.	63	29
			Denver, Colo.	9	1
			Salt Lake City, Utah	3	0
			Seattle, Wash.	16	0
			San Francisco, Cal.	17	2

AUTHORITIES: Same as for Tables 7 and 8 above.

TABLE 10.—*Average number of days with snowfall, at stations in France and United States.*

Stations.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Annual.
France:							
Paris—Parc St. Maur (1873–1903)[a]	1	3	4	3	3	1	15
Montdidier (1784–1869)[b]	1	3	4	3	3	1	15
Fécamp (1853–1882)[c]	0	2	2	2	2	0	8
Brussels, Belgium (1833–1850)[d]	1	4	6	5	5	2	23
United States:							
New York							20
Washington							14
Atlanta, Ga							7
Chicago, Ill							30
Kansas City, Kans							19
Oklahoma, Okla							7
Denver, Colo							33

[a] Annuaire de la Société Météorologique de France, 1905 (Paris).
[b] Annales du Bureau Central Météorologique de France, 1895.
[c] Annales du Bureau Central Météorologique de France, 1885.
[d] *Quetelet:* Climat de la Belgique, Bruxelles, 1857.
For the United States, see Table 8 above.

TABLE 11.—*Average cloudiness, in percentages of total sky, at selected station in France and Belgium and in the United States.*

The values given in this table for France and Belgium are averages for the various hours of observation and probably approximate the daily averages, the records in most cases covering periods of at least 10 years. Those for the United States represent the normal average daily cloudiness, *sunrise to sunset*, for a long period of years.

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
France:	%	%	%	%	%	%	%	%	%	%	%	%	%
Dunkirk	72	71	63	59	57	58	55	63	60	71	79	72	65
Paris—Parc St. Maur	73	72	65	59	56	51	55	49	51	53	62	71	60
Rouen	65	64	58	56	51	52	49	52	58	61	67	67	58
Brest	71	71	70	64	56	67	64	60	61	66	75	64	66
Angers	68	61	57	56	52	53	54	53	56	61	69	69	59
Nantes	75	66	63	64	58	60	57	54	56	61	75	66	63
Besançon	60	64	58	55	51	53	48	48	49	59	65	65	55
Cluny	62	53	57	53	45	43	39	39	39	61	63	65	52
Nice	36	34	32	43	38	29	25	33	33	37	33	34	34
Marseille	47	47	41	46	46	36	23	30	42	44	42	49	41
Montpellier	39	38	36	40	36	31	26	28	35	39	40	41	36
Toulouse	68	57	57	59	57	55	44	45	50	52	61	66	56
Brussels, Belgium	77	78	71	62	63	67	63	65	58	65	75	79	69
United States:													
New York	58	54	56	54	53	51	51	51	48	48	54	56	53
Washington	58	54	55	50	50	48	46	48	45	45	51	54	50
Atlanta	57	55	51	49	47	50	54	54	47	38	45	53	50
Chicago	59	56	57	52	48	47	40	40	43	48	58	61	52
St. Louis	53	54	55	51	50	48	44	39	38	35	51	58	48
New Orleans	54	53	49	47	44	47	52	50	43	38	46	53	48
Denver	37	40	46	49	52	41	44	44	35	36	37	38	41
Salt Lake City	59	58	55	51	47	34	30	34	30	38	47	58	45
Seattle	77	71	64	60	65	58	42	42	56	67	75	79	63
San Francisco	53	49	48	41	40	35	41	43	33	35	42	50	43

AUTHORITIES:
France—Annales du Bureau Central Météorologique de France, 1884.
United States, as above.

TABLE 12.—*Prevailing wind directions and average relative humidities for Montpellier, Sèvres, and Brussels.*

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
	Prevailing winds.												
Sèvres (10 years)	SW	SW	W	SW	NE	W	W	W	W	SW	SW	SW	SW
Brussels (8 years)	SW	SW	SW	SW	SW	N	SW	SW	SW	SW	SW	SW	SW
	Average relative humidity.												
Sèvres (10 years)	%	%	%	%	%	%	%	%	%	%	%	%	%
7 a. m.	89	89	89	79	73	72	76	82	90	94	92	92	....
12 noon	78	69	60	51	51	51	54	55	58	68	76	80	....
9 p. m.	86	82	78	72	74	76	77	79	83	90	90	89	....
Montpellier (14 years):													
9 a. m.	82	76	70	67	62	58	56	57	66	71	80	80	....

AUTHORITIES: Annual reports of the French and Belgian meteorological services.

1.65
WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIV

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

ANNUAL, 1917

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
APRIL 6, 1918

MEAN ANNUAL ISOTHERMS AND PREVAILING WINDS, 1917

LINES PASS THROUGH POINTS OF EQUAL TEMPERATURE, ARROWS FLY WITH THE WIND


48
49
48
50
57
47
47
47

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

Vol. XXV. PARKERSBURG, W. VA., YEAR, 1917. No. 13.

GENERAL SUMMARY.

The year 1917, with an average temperature of 49.9°, was the coldest year of record, or since 1891. The coldest year of previous record was 1904, with a mean temperature of 50.9°. January was the only month having an average temperature above the normal. The summer was considerably cooler than usual and an unprecedentedly long cold period set in early in September and continued into 1918.

The precipitation averaged considerably above the normal and the snowfall was much above the yearly average. While March, May, and October were wet and November and December unusually dry, the precipitation was quite favorably distributed throughout the year.

The spring was unfavorable for fruit, especially peaches, owing to low temperatures and cold rain and sleet storms, and farm work and vegatation were much retarded by unseasonally cold weather during the last half of April and entire month of May. September was also exceptionally cool, making the season of growth more than two weeks shorter than usual.

The average cloudiness was considerably below the normal. The sunshine at Parkersburg averaged 49 per cent of the possible amount, or 5 per cent above the normal, while the average at Elkins was 49 per cent, or 5 per cent above the normal.

The wind movement for Parkersburg was 48,521 miles and for Elkins, 37,075 miles.

THE WEATHER BY MONTHS.

January.—January was slightly warmer and considerably wetter than usual, with the snowfall slightly below the average and the sunshine somewhat above. The month was also free from periods of unusually low temperature. During the coldest weather the ground was protected by snow, but after the 21st the conditions were unfavorable for winter grains and grass, owing to alternating periods of freezing and thawing, with lack of snow-cover. Heavy rain and melted snow on the 21st, attending seasonally high temperature, caused marked floods in the Monongahela and Little Kanawha Rivers and tributaries. Much damage resulted from flooding in Cairo and Weston.

February.—February was exceptionally dry until the 27th, but heavy snow or rain on the last two days made both the precipitation and snowfall somewhat above the normal. The lack of snow-cover during periods of freezing and thawing was unfavorable for winter grains. The lowest temperatures occurred on the 4-5th and 12-13th, when the morning readings ranged generally from zero to 10° below zero. After the 17th the temperature was continuously above the normal, with the highest readings occurring generally on the 26th. The conditions were unfavorable for peaches but the outlook for apples at the close of the month was good.

March.—March, 1917, was the wettest March of record, the precipitation over the greater part of the State averaging from 7 to 9 inches, while at Pickens and Camden-on-Gauley the monthly amounts were 14.20 and 13.55 inches, respectively. The previous record for monthly excessive precipitation for March was 10.05 inches at Weston in 1898. There were no severe cold waves and the temperature conditions after the 10th were especially favorable for winter grains and fruit; but peaches were injured considerably, especially in the higher altitudes, by sleet and cold rain during the first decade. On the 6th the morning readings ranged generally from zero to 10° below zero, while on the 31st the maximum temperatures in many sections were above 80°.

April.—While the temperature during April averaged practically normal, the first half of the month was unseasonally cold and killing frosts and freezing temperature were general until the 17th. Cold rains and sleet caused much damage to peach orchards, especially in the higher altitudes. During the last two weeks the conditions were favorable for farm work and growth, and wheat showed considerable improvement at the close of the month. The precipitation was considerably below the normal and well distributed and the snowfall was generally unimportant in the agricultural districts. The highest temperatures occurred generally on the 19-20th.

May.—With an average temperature 6.7° below the normal, May, 1917, was the coolest May of record for the State. Freezing temperature and heavy to killing frosts occurred in most sections at the close of the first decade, and freezing temperature and heavy frosts were also noted in many of the more elevated sections on the 26th. The conditions were generally droughty until the 26th, when excessive rain occurred, making the average for the month much above the normal. As the season was late, not much frost damage resulted, but all growth was retarded. Many fields were badly washed by the excessive rains and crops were ruined on bottom lands by flooded streams. Corn was especially late at the close of the month.

June.—June was cooler and considerably drier than usual. The coldest weather of record for the season occurred near the close of the second decade. On the morning of the 17th the temperature at many of the stations was below 40°, while at Bluefield the reading was 31°. The rainfall distribution was unfavorable. During the first decade planting was delayed by wet weather, while the ground was too dry at the close of the month. The rainfall was insufficient for growth in the southeastern and eastern counties. Pastures and meadows were short and corn was especially backward.

July.—July was characterized by protracted cool weather and frequent showers. The temperature was below or near the normal for about 24 days. Most of the showers covered small areas, making the ground too wet for cultivation in sections, while in near-by localities rain was needed. On the 25th light to moderate rain fell at Parkersburg for 40 minutes while the sun shone brightly. Corn made rapid progress during the

last week, when the conditions were especially favorable for the harvesting of hay and oats.

August.—While the temperature and rainfall for August averaged practically normal, the month was considered favorably cool and dry. The highest temperature occurred on the 1st. At several stations the August low temperature record for the State was broken on the 26th, when light frosts were observed at Davis and Pickens. The conditions were droughty over most of the southern and central counties from the 15th to the 30th. Excessive rains on the 13-14th caused much damage to crops in Ohio, Marshall, and Wetzel Counties. The conditions were favorable for harvesting and threshing. Corn was two weeks late at the close of the month.

September.—September, 1917, was the coolest September of record for the State and also marked the beginning of an exceptionally long period of cool weather. The lowest temperatures of record for the season occurred in many localities on the 11-12th, when light to killing frosts occurred, causing much damage to late vegetables and corn. Over most of the agricultural districts the conditions were somewhat droughty from the 15th to the 28th. The sunshine was abundant, making the weather favorable for harvesting, but the ground was too dry for fall plowing and seeding.

October.—October, 1917, was the coolest October since 1895. The temperature was continuously below the normal, except for three or four short periods. Freezing temperatures occurred on the 2d and at short intervals during the month. The precipitation was much above the normal and the snowfall was more than four times greater than for any other October of record. Farm work was much retarded by the wet and cold weather and a heavy snowstorm on the 24th caused the loss of considerable fruit. Owing to the scarcity of farm labor, much fruit also rotted on the ground.

November.—November was exceptionally cold and dry. Excepting three or four short periods, the month was continuously cool and measurable amounts of precipitation were not received in many localities until the 21st, making one of the longest dry periods of record for the State. The germination and growth of winter grains were retarded by the cold and dry weather, and many fields were not seeded until the last decade, owing to a wet October, the lateness of the corn crop, and the scarcity of labor.

December.—December, 1917, was the coldest and driest December of record for the State. In fact, it was the coldest month since 1895 and the driest winter month, except January, 1895. The lowest temperatures of record for the State occurred in sections of the southeastern counties. A temperature of 37° below zero was recorded at Lewisburg on the morning of the 30th, the lowest temperature of reliable record for the State. Nearly all the precipitation occurred as snow. During the cold wave at the beginning of the second decade the conditions were unfavorable for winter grains, owing to lack of snow-cover, but the ground was well covered with snow during the record-breaking cold weather at the close of the month.

CORRECTIONS.

The following changes should be made in the monthly reports of the West Virginia Section for 1917:

March.—Elkins, page 19, make sea-level pressure 30.10 inches, instead of 30.09 inches.

November.—Elkins, page 86, make maximum temperature on the 22d 50°, instead of 49°, and mean maximum temperature 49.3°, instead of 49.2°.

Dates on which First and Last Killing Frost Occurred or Minimum Temperature Fell to 32 Degrees.

Station.	Last in Spring.	First in Autumn.	Station.	Last in Spring.	First in Autumn.
Bancroft	April 16	Oct. 7	Morgantown	May 26	Oct. 2
Bayard	May 26	Sept. 11	Moundsville	.....	Oct. 7
Beckley	April 16	Oct. 1	New Cumberland	May 10	Oct. 2
Bens Run	April 16	Oct. 7	New Martinsville	May 10	Oct. 7
Bluefield	April 16	Oct. 7	Nuttallburg	April 16	.....
Brandywine	May 26	Sept. 11	Parkersburg	April 16	Oct. 9
Buckhannon	May 10	Sept. 11	Parsons	May 26	Oct. 5
Burlington	April 17	Sept. 11	Philippi	May 26	.....
Charleston	April 16	Oct. 8	Piedmont	April 16	Oct. 2
Creston	May 10	Oct. 7	Pickens	May 26	Sept. 11
Cuba	April 22	.....	Point Pleasant	May 10	Oct. 7
Elkins	April 16	Oct. 2	Powellton	April 17	.....
Evans	May 10	Oct. 7	Robertsburg	April 17	Oct. 7
Fairmont	April 16	Oct. 7	Romney	April 16	Sept. 11
Glenville	May 26	Oct. 7	Ryan	May 26	Sept. 11
Grafton	April 16	Oct. 7	Smithfield	May 14	Oct. 2
Green Sulphur Springs	May 10	.....	Spencer	April 18	.....
Hinton	April 16	Oct. 10	Terra Alta	May 26	Sept. 11
Holcomb	May 15	Sept. 12	Union	April 26	Oct. 2
Huntington	April 15	Oct. 14	Upper Tract	April 16	Oct. 2
Lewisburg	April 16	Oct. 2	Wellsburg	April 16	.....
Lost Creek	May 26	Sept. 11	Weston	May 10	Oct. 7
Mannington	May 14	Oct. 7	Wheeling	May 11	Oct. 9
Marlinton	May 26	Sept. 11	White Sulphur Spgs	May 14	Oct. 2
Martinsburg	April 16	Sept. 11	Williamson	April 15	Oct. 13
Moorefield	May 12	Oct. 2			

COMPARATIVE ANNUAL DATA FOR WEST VIRGINIA.

Year	Temperature			Precipitation
	Mean	Highest	Lowest	
1891	52.0	...	....	45.96
1892	52.1	99	−12	38.33
1893	52.0	99	−25	39.82
1894	53.5	103	−29	34.52
1895	51.5	107	−21	32.82
1896	53.6	97	−10	43.49
1897	53.5	103	−18	41.59
1898	54.8	103	−13	47.61
1899	53.2	100	−35	40.97
1900	54.1	104	−11	37.62
1901	52.1	104	−11	44.78
1902	52.8	104	−14	42.19
1903	52.0	105	−19	40.55
1904	50.9	98	−20	33.33
1905	52.3	100	−22	45.53
1906	54.0	101	−11	44.36
1907	51.7	98	−23	52.15
1908	53.7	101	−16	40.47
1909	53.0	101	−10	43.02
1910	52.3	98	−11	38.60
1911	54.6	106	− 5	47.13
1912	51.7	100	−34	43.78
1913	53.9	103	− 4	49.02
1914	52.3	106	−22	39.71
1915	52.8	101	− 8	43.76
1916	52.6	104	−18	44.63
1917	49.9	104	−37	44.33

TEMPERATURE AND PRECIPITATION FOR WEST VIRGINIA 1917.

Month	Temperature in degrees Fahrenheit				Precipitation in inches				Sky			Prevailing direction of the wind.
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest local amount	Number of rainy days	Clear	Pt. Cloudy	Cloudy	
January	33.3	+0.4	77	− 9	4.66	+0.77	3.00	12	11	6	14	w.
February	31.0	−0.9	80	−14	3.23	+0.14	1.95	9	9	7	12	w.
March	41.9	−0.8	85	− 3	6.58	+2.25	2.90	14	14	4	13	w.
April	51.7	0	90	10	2.99	−0.53	2.35	9	13	8	9	w.
May	55.5	−6.7	95	25	4.38	+1.05	3.52	10	11	8	12	w.
June	67.7	−1.1	99	31	3.81	−0.68	2.61	12	14	9	7	w.
July	72.6	−0.7	104	44	4.83	+0.24	3.13	12	14	10	7	w.
August	71.6	−0.1	102	39	3.53	+0.02	4.00	8	17	8	6	w.
September	62.4	−3.7	98	23	2.74	−0.21	2.46	7	17	7	6	w.
October	49.2	−5.7	89	16	4.35	+1.64	2.50	10	15	6	10	w.
November	39.6	−3.4	78	0	0.89	−1.70	1.50	5	16	4	10	w.
December	24.3	−9.1	67	−37	1.51	−1.76	1.15	8	11	6	14	w.
Annual	50.1	−2.6	104	−37	43.56	+1.23	4.00	116	162	83	120	w.

CLIMATOLOGICAL DATA FOR THE YEAR 1917

Stations.	Counties.	Elevation, feet.	Temperature (degrees Fahrenheit).						Precipitation (inches).							Number rainy days.	Sky.			Prevailing direction of wind.
			Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.	Total snowfall.		Number clear days.	Number partly cloudy days.	Number cloudy days.	
PANHANDLE DIVISION.																				
Bayard	Grant	2,700	16	44.8	87	Aug. 1	−18	Dec. 30	8	42.02	6.39	Jan.	0.64	Nov.	101.9	168	96	65	204	w.
Brandywine	Pendleton		2	49.7	97	Aug. 1	−23	Dec. 30	2	27.91	6.01	Mar.	0.29	Nov.		100	243	35	87	
Burlington	Mineral	875	24		99	Aug. 1	−16	Dec. 30	24	34.76	4.95	Mar.	0.30	Nov.						w.
Harpers Ferry	Jefferson	244							29	38.00	8.27	July	0.20	Nov.	33.4	86				w.
Martinsburg	Berkeley	435	25	50.9	101	July 31	− 4	Dec. 30†	26	38.71	6.08	Oct.	0.70	Nov.		96	209	82	74	nw.
Moorefield	Hardy	900	22		102	Aug. 1†	−26	Dec. 30	22				0.22	Nov.						
Piedmont	Mineral	919	2	49.5	96	Aug. 1	− 8	Dec. 30	2	37.44	7.67	Mar.	0.25	Nov.		128				nw.
Romney	Hampshire	824	21		102	Aug. 1	−15	Dec. 30	21				0.55	Nov.	75.0					
Upper Tract	Pendleton	1,230	20	50.8	95	Aug. 1	−25	Dec. 30	20	30.12	5.53	July	0.05	Nov.		63				w.
Averages and extremes				49.1	102	Aug. 1	−28	Dec. 30		35.57	8.27	July	0.05	Nov.	70.1	107	183	60	122	w.
NORTHERN DIVISION.																				
Bens Run	Pleasants	622	17	51.1	99	Aug. 5	− 7	Dec. 11	17	47.19	6.28	Oct	0.78	Nov.	108.0	123	223	66	76	
Buckhannon	Upshur	1,411	22	49.3	90	Aug. 1	−28	Dec. 30	22	51.17	7.01	Mar.	1.07	Nov.	47.5	111	192	55	118	
Cortland	Tucker	3,300							3	36.83	5.18	Jan.	0.79	Nov.	70.5	79				
Creston	Wirt	701	17	51.0	96	July 31†	−17	Dec. 30	17	52.40	7.21	Mar.	0.72	Nov.	37.0	129				w.
Davis	Tucker	3,093							10	50.75	9.29	Mar.	1.34	Nov.	111.0	131	154	42	169	sw.
Elizabeth	Wirt	646							7	51.22	7.54	July	0.60	Nov.		99				
Elkins	Randolph	1,940	18	48.0	91	Aug. 1	−28	Dec. 30	18	40.23	7.12	Mar.	1.17	Dec.	49.1	174	79	113	173	w.
Fairmont	Marion	883	13	50.2	97	Aug. 1†	−13	Dec. 30	13	36.89	5.50	Mar.	0.60	Nov.	42.0	138	222	35	108	w.
Glenville	Gilmer	738	25	52.3	100	Aug. 21	−25	Dec. 30	25	47.24	8.17	Mar.	0.92	Nov.	36.0	123	136	141	88	w.
Gralton	Taylor		25	49.2	95	July 30	−20	Dec. 30	25	39.69	6.95	July	0.60	Nov.						e.
Lost Creek	Harrison	1,026	21	49.7	95	Aug. 1	−26	Dec. 30	21	40.52	5.82	June	0.62	Nov.	42.4	114	177	63	125	w.
Mannington	Marion	974	16	49.0	91	Aug. 1	−21	Dec. 30	16	46.24	6.58	June	0.61	Nov.	51.1	153	130	95	140	w.
Morgantown	Monongalia	1,250	26	50.7	95	July 31†	−13	Dec. 30	26	34.65	4.99	May	0.64	Nov.	56.8	131	165	28	172	sw.
Moundsville	Marshall	642	16		95	June 13†	−10	Dec. 30	16											sw.
New Cumberland	Hancock	987	21	47.5	94	July 31†	−15	Dec. 30	21	40.53	6.29	Oct.	0.20	Nov.	43.3	123				sw.
New Martinsville	Wetzel	634	25	51.2	98	Aug. 1	−11	Dec. 30	25	46.97	6.25	Oct.	0.85	Nov.		125	169	67	129	s.
Parkersburg	Wood	638	30	51.0	94	July 31	−10	Dec. 30	30	41.16	6.17	July	0.60	Nov.	52.4	145	124	112	129	se.
Parsons	Tucker	1,656	19	47.5	91	Aug. 1	−26	Dec. 30	19	41.39	5.23	Jan.	0.87	Nov.	50.5					
Philippi	Barbour	1,149	22		98	June 28			22											w.
Pickens	Randolph	2,697	16	47.3	92	June 13	−20	Dec. 30	16	71.38	14.20	Mar.	2.10	Aug.	120.0	159				w.
Rowlesburg	Preston	1,375							32	49.37	7.28	May	1.29	Nov.		141				w.
Saint Marys	Pleasants	577							10	46.00	6.06	Oct.	0.63	Nov.		134				
Smithfield	Wetzel	835	13	48.7	98	July 24	−16	Dec. 30	13	52.73	7.67	July	1.05	Nov.	81.0	158	232	71	62	nw.
Terra Alta	Preston	2,612	18	45.3	87	Aug. 21	−18	Dec. 30	18	38.66	5.70	May	0.70	Nov.	83.0	129	165	117	83	w.
Wellsburg	Brooke	1,225	18		89	July 31†			18											w.
Weston	Lewis	1,026	23	51.5	94	July 30	−20	Dec. 30	23	43.46	6.80	Mar.	0.70	Nov.		116				
Wheeling	Ohio	645	32	50.0	102	July 31	− 9	Dec. 30†	32	45.79	8.17	July	0.38	Nov.	51.7	150	171	60	134	sw.
Averages and extremes				49.5	102	July 31	−28	Dec. 30		45.52	14.20	Mar.	0.20	Nov.	63.0	131	162	84	119	w.
SOUTHERN DIVISION.																				
Bancroft	Putnam	574	14	51.1	94	July 31†	−19	Dec. 30	14	45.88	6.97	Mar.	0.91	Nov.	39.7	114	229	12	124*	ne.
Beckley	Raleigh	2,440	18		92	July 30	−20	Dec. 30	18											w.
Bluefield	Mercer	2,558	23		88	July 31†	−25	Dec. 30	23											
Camden-on-Gauley	Webster								1	57.20	13.55	Mar.	1.18	Oct.						
Charleston	Kanawha	597	15	56.0	99	June 26	−17	Dec. 30	15	53.59	8.26	Mar.	1.65	Nov.	36.0	124	137	15	213	w.
Clay	Clay	706	2						2	41.21	9.66	Mar.	0.38	Nov.		80				
Cuba	Jackson	650	16		98	Aug. 1	−22	Dec. 30	16											
Dam 19 O. R.	Wood								1	40.11	5.45	Oct.	0.68	Nov.		138				
Dam 22 O. R.	Jackson	538							2	46.35	7.64	July	0.50	Nov.		126				
Dam 26 O. R.	Mason								1	40.83	7.15	Mar.	0.78	Nov.						
Elkhorn	McDowell	1,933	25				−17	Dec. 30	25											w.
Evans	Jackson	606	4	52.2	92	July 31†	−22	Dec. 30	4	46.95	6.77	Mar.	0.84	Nov.	53.8	139	148	36	181	
Green Sulphur Springs	Summers	1,600	22				−22	Dec. 30	22											
Hinton	Summers	1,450	21	50.8	95	June 26†	−13	Dec. 30	21	41.65	8.47	Mar.	0.72	Nov.	24.0	132	144	28	193	w.
Holcomb	Nicholas	2,042	6	48.3	92	June 26†	−22	Dec. 30	6	52.70	8.72	Mar.	1.75	Dec.	59.0	121	144	76	145	
Huntington	Cabell	538	22	51.9	99	Aug. 1	−14	Dec. 30†	22	50.63	8.53	Mar.	1.20	Nov.	45.3	117	160	34	171	w.
Kayford	Kanawha								1	54.79	9.03	Mar.	1.16	Nov.		146				
Lewisburg	Greenbrier	2,200	18	49.2	92	Aug. 1	−37	Dec. 30	18	36.91	7.26	Mar.	0.75	Nov.	19.5	94	140	118	107	nw.
Marlinton	Pocahontas	2,131	19	44.4	86	June 26†	−24	Dec. 30	19	45.67	9.40	Mar.	0.94	Nov.	38.0	136	87	164	114	nw.
Point Pleasant	Mason	553	25	51.4	97	Aug. 1	−19	Dec. 30	25	47.31	6.84	Mar.	0.69	Nov.		116	134	49	182	sw.
Raleigh	Raleigh								1	45.96	9.35	Mar.	1.36	Nov.		126				
Renick	Greenbrier	1,653							2	37.80	8.25	Mar.	0.38	Nov.		77				
Robertsburg	Putnam	574	18	51.2	96	Aug. 21	−22	Dec. 30†	18	42.62	6.59	Mar.	1.16	Nov.	36.0	117				
Ryan	Roane	700	15	50.2	95	July 30†	−27	Dec. 30	15											
Union	Monroe	2,250	14	49.6	93	July 29†	−34	Dec. 30	14	48.57	7.82	Mar.	1.25	Nov.	51.6	145	137	112	116	
White Sulphur Springs	Greenbrier	1,940	8	50.3	94	July 31†	−34	Dec. 30	8	43.39	7.55	Mar.	0.30	Nov.	33.0	100	250	54	61	
Williamson	Mingo	660	18	53.1	96	Aug. 1	−13	Dec. 30†	18	49.12	9.26	Mar.	1.00	Nov.	22.3	141	186	77	102	w.
Averages and extremes				50.7	99	June 26†	−37	Dec. 30		45.81	13.55	Mar.	0.30	Nov.	38.2	118	158	64	143	w.
State averages and extremes				49.9	102	July 31†	−37	Dec. 30		44.33	14.20	Mar.	0.05	Nov.	54.6	123	163	74	128	w.

* 1 day interpolated from nearby stations.

† And other dates.

Monthly and Annual Mean Temperatures for the Year 1917, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September		October.		November		December.		Annual.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
PANHANDLE DIVISION																										
Bayard	28.8	−0.3	26.1	−1.2	34.9	−2.5	46.0	−0.9	50.8	−6.5	63.2	−0.3	67.6	−0.3	68.2	+2.4	55.8	−4.5	42.5	−6.7	34.3	−4.2	18.8	−10.4	44.8	−3.0
Brandywine	34.5	.....	32.6	.....	41.4	.....	51.3	.....	55.4	.....	66.6	.....	72.1	.....	70.6	.....	61.4	.....	48.8	.....	38.9	.....	22.7	.....	49.7	.....
Burlington	31.2	0	30.4	+0.4	39.5	−1.5	51.4	+0.6	56.6	−5.6	67.4	−1.0	73.2	+0.4	71.9	+0.7	59.8	−4.9	.....	.....	38.8	−3.5	22.9	−9.7	.....	.....
Martinsburg	32.9	+2.0	29.8	0	41.3	+1.5	52.8	+1.3	58.0	−5.3	71.4	+0.7	76.6	−0.4	73.8	+0.7	61.4	−5.1	48.4	−6.2	40.4	−2.5	23.6	−9.4	50.9	−1.9
Moorefield	35.7	+3.4	35.4[a]	+4.0	43.2	−0.3	54.2	+2.1	59.4	.....	70.8	+1.6	76.7[b]	+2.8	.....	.....	63.6[a]	−3.2	51.5[b]	−3.2	41.4[a]	−2.1	23.8	−9.5	.....	.....
Piedmont	32.5	.....	31.5	.....	39.8	.....	51.1	.....	55.8	.....	67.1	.....	72.4	.....	70.7	.....	60.8	.....	48.2	.....	40.4	.....	24.0	.....	49.5	.....
Romney	34.3[a]	+3.1	33.3[a]	+1.8	41.5[f]	−0.8	47.6	−3.9	.....	.....	70.4	+0.6	75.2	0	73.0	+0.2	62.0[a]	−4.5	51.1	−3.7	41.8[f]	−0.8	24.2[c]	−8.1	.....	.....
Upper Tract	33.3[b]	+0.5	32.8	+0.7	41.8[b]	−1.1	54.1[a]	+2.8	57.1[a]	−4.8	68.4[a]	+0.7	72.6	+0.2	71.3	+0.3	62.2	−4.9	51.2[c]	−4.4	42.6[g]	−2.1	22.3[b]	−11.6	50.8	−2.0
NORTHERN DIVISION																										
Bens Run	32.6	−0.2	31.2	−0.1	43.2	+0.4	52.8	+0.5	56.6	−7.0	68.4	−1.8	73.8	−1.5	74.0	+0.3	64.2	−3.9	50.1	−6.2	40.6	−2.6	25.5	−7.7	51.1	−2.5
Buckhannon	33.4	−1.0	30.6	−0.6	41.6	+0.3	52.0	+1.0	55.4	−6.8	66.3	−2.3	70.8	−1.6	70.1	0	61.1	−3.3	48.0	−5.1	37.8	−3.7	25.0	−7.9	49.3	−2.6
Creston	31.7[f]	.....	32.0	−0.2	42.2	−1.4	53.6	+0.7	57.6	−6.0	68.8	−1.7	73.6	−1.2	73.4	+0.2	63.4	−4.1	49.7	−5.6	40.0	−3.7	26.2	−7.8	51.0	.....
Elkins	32.6	+3.6	28.9	−2.6	40.6	+0.9	49.2	+0.5	53.6	−5.5	65.0	−1.6	70.4	−0.1	69.4	+1.0	60.1	−1.8	47.2	−4.2	37.0	−2.6	22.5	−10.0	48.0	−1.9
Fairmont	32.2	−2.2	28.8	−3.7	40.3	−1.1	51.6	−0.6	56.2	−6.5	68.7[a]	−1.3	74.6	+0.1	74.2	+1.4	63.6	−3.7	49.0	−6.1	39.0	−3.8	24.8	−7.9	50.2	−3.0
Glenville	35.1	+1.7	33.6	+1.4	44.9	+1.0	55.3	+2.2	58.6	−4.8	71.2	+0.7	76.0	+1.2	75.4	+1.9	67.4	−0.3	52.4	−3.0	40.5	−3.0	27.0	−8.0	52.3	−0.8
Grafton	33.2[b]	+0.3	30.0	−1.4	41.0	−1.6	49.7	−1.9	52.8[d]	.....	65.7	−3.6	70.7	−2.2	69.6[b]	−1.9	62.8	−3.8	50.4	−4.8	39.2	−3.9	25.1	−8.9	49.2	.....
Lost Creek	33.0	−0.5	30.8	+0.3	41.0	−1.5	51.7	+1.7	54.6	−6.4	66.6	−1.1	72.2	−0.3	71.2	+0.6	61.6	−3.6	49.2	−5.2	38.9	−3.3	25.4	−8.0	49.7	−2.3
Mannington	31.7	−0.4	30.6	+0.1	40.2	−2.6	50.9	−0.5	54.8	−6.6	66.4	−1.7	71.2	−1.4	70.2	−0.7	60.6	−4.8	48.8	−5.0	38.7	−2.4	24.4	−8.1	49.0	−2.8
Morgantown	32.9	+0.2	30.5	−0.8	41.2	−0.8	50.4[f]	−1.0	55.2	−7.5	69.4	+0.5	74.0	+0.4	73.1	+0.9	63.6	−3.9	51.6[k]	−3.6	40.6[a]	−2.8	26.0	−8.0	50.7	−2.2
Moundsville	33.0	−0.1	31.4	−0.1	42.8	−0.3	54.1	+1.9	.....	.....	71.2	+1.5	75.5	+1.0	71.4	−1.3	61.0[a]	−6.6	48.4[a]	−7.5	38.2[a]	−5.9	23.3[a]	−10.4	.....	.....
New Cumberland	26.8[j]	−2.1	26.1	−1.2	39.8[a]	+0.1	48.6	−0.8	53.6	−7.3	66.1	−1.8	71.4	−1.6	70.4	−0.4	60.4	−5.1	47.6[a]	−6.6	37.4	−3.9	21.4	−9.6	47.5	−3.4
New Martinsville	32.0	−1.2	32.2	+0.2	41.8	−1.6	53.6	+0.4	57.4	−6.4	69.2	−2.2	73.6	−2.0	74.2	+0.1	65.2	−3.5	51.0	−5.8	39.6	−5.0	25.2	−9.7	51.2	−3.1
Parkersburg	33.2	+1.9	30.8	−2.7	42.2	0	52.6	−0.5	57.6	−5.8	68.6	−2.8	74.4	−1.1	73.6	+0.3	64.0	−2.1	50.0	−4.6	40.6	−2.5	24.8	−10.4	51.0	−2.5
Parsons	31.5	−0.5	29.7	+0.4	38.8	−3.0	48.9	−3.2	53.0	−6.4	64.2	−2.1	69.7	−0.7	68.8	−0.3	59.6	−3.7	46.3[e]	−6.3	36.6	−4.6	22.9	−8.5	47.5	−3.2
Philippi	32.2	−1.0	27.6	−3.8	42.4	−0.1	52.5	+1.2	54.4	−7.5	69.4	.....	70.0	−2.9	.....	.....	.....	.....	.....	.....	39.4	−3.8	.....	.....	.....	.....
Pickens	32.4	+0.6	29.3[b]	−2.4	40.0[a]	+0.5	46.7[d]	−1.8	52.4	−6.6	63.8	−1.4	66.8[a]	−2.0	67.0	+0.1	59.5	−2.3	48.0	−4.2	38.2[a]	−2.4	23.7	−8.6	47.3	−2.5
Smithfield	31 0	−1.4	28.2	−2.7	40.6	−1.1	51.0	−0.7	54.8	−6.7	67.2	−0.8	72.0	−0.4	70.6	−0.6	60.9	−4.5	47.0	−6.5	37.5	−3.5	23.2	−8.6	48.7	−3.1
Terra Alta	29.1	+0.7	26.2	−1.5	35.7	−3.3	46.2	−1.4	50.7	−8.9	62.7	−3.5	67.6	−2.0	67.1	−0.9	57.4	−5.7	44.9	−6.8	35.6	−6.5	20.7	−9.8	45.3	−4.1
Wellsburg	28.6	−1.2	26.8	−0.3	38.5	−0.4	50.6	−1.8	53.4	−7.5	66.0	−1.3	71.0	−0.9	70.0	0	60.2	−4.5	.....	.....	.....	.....	.....	.....	.....	.....
Weston	34.6	+0.6	32.6	+1.2	42.6	−0.9	53.4	+0.8	57.2	−6.0	68.5[d]	−2.5	73.4	−1.3	72.8	−0.2	63.8	−3.6	51.2	−3.7	41.0	−2.3	27.4	−7.7	51.5	−2.1
Wheeling	30.8	.....	27.6	.....	40.2	.....	52.2	.....	56.6	.....	69.8	.....	75.0	.....	74.0	.....	64.1	.....	48.2	.....	38.3	.....	22.9	.....	50.0	.....
SOUTHERN DIVISION																										
Bancroft	34.8	−0.7	30.7	−2.7	42.8	−1.4	52.9	−0.7	56.5	−7.8	68.3	−2.8	73.7	−1.9	72.7	−1.1	64.1	−5.1	49.6	−7.8	41.2	−3.8	25.4	−10.1	51.1	−3.8
Beckley	.....	.....	32.4	−0.6	46.9	+4.1	53.0	+3.7	57.2	−2.8	65.2	−2.0	70.4	−1.1	69.7	−1.5	2.5	−1.2	55.5[a]	.....	.....	.....	24.3[c]	−9.4	.....	.....
Bluefield	38.8	+4.1	33.6	0	54.2[i]	+0.6	.....	.....	54.4[b]	−8.1	66.6[a]	−2.3	70.3[c]	−1.6	69.8[a]	−1.5	63.1[a]	−3.1	49.4	−6.1	42.0	−2.5	26.9[a]	−8.1	.....	.....
Charleston	40.4	+0.9	38.8	+0.4	48.4	−0.3	57.2	+0.4	61.3	−5.0	73.4	+0.8	76.6	+0.1	76.4	+0.9	67.6	−2.8	54.8	−3.8	45.0	−3.1	32.4	−7.2	56.0	−1.6
Clay	34.4[a]	.....	28.9[a]	.....	45.8	.....	53.4	.....	57.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuba	32.8	−1.3	31.2	−1.0	42.0	−2.0	51.6	−1.1	.....	.....	68.8	+1.1	73.6	+0.1	72.6	+0.6	62.8	−4.0	.....	.....	40.4	−3.2	26.7	−7.2	.....	.....
Elkhorn	.....	.....	35.8	0	40.8	−5.0	51.8	−1.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49.8	−6.0	42.4	−3.4	28.3	−10.0	.....	.....
Evans	35.0	.....	32.8	.....	44.2	.....	54.4	.....	58.6	.....	69.4	.....	74.0	.....	73.1	.....	64.4	.....	52.0	.....	42.0	.....	26.6	.....	52.2	.....
Green Sulphur Springs	33.1	−0.2	31.8	−0.4	46.2	+3.3	.....	.....	56.0[a]	−5.8	71.4	+3.0	74.4	+2.0	.....	.....	.....	.....	.....	.....	.....	.....	26.6	−7.3	.....	.....
Hinton	35.2	+0.2	30.4	−3.9	43.2	−0.9	53.0	−0.3	56.2	−8.1	68.7	−2.0	73.6	−0.9	72.8	−1.2	64.8	−3.3	48.3	−8.2	40.6	−3.8	23.0	−12.6	50.8	−3.8
Holcomb	32.8	.....	28.3	.....	40.9	.....	49.7	.....	53.2	.....	65.1	.....	69.7	.....	69.0	.....	61.0	.....	47.9	.....	38.8	.....	23.5	.....	48.3	.....
Huntington	34.1	+0.7	31.2	−1.0	42.6	−1.9	55.1	+1.1	59.1	−5.8	71.7[a]	−0.8	75.9	−0.8	74.7	+0.1	65.1	−3.4	47.8	−8.3	40.0	−3.7	25.6	−8.8	51.9	−2.7
Lewisburg	34.6	+1.9	32.2	+0.4	42.4	+0.2	51.8	+1.7	54.2	−6.7	65.5	−1.9	70.4	−0.9	69.2	−0.8	62.0	−2.5	47.4	−5.9	39.1	−2.3	22.1	−10.4	49.2	−2.3
Marlinton	29.4	+0.2	27.1	−2.2	36.9	−1.9	45.8	−1.6	50.2	−8.6	61.2	−4.1	66.3	−2.5	64.2	−3.5	57.4	−4.8	42.7	−7.7	33.6	−4.7	18.0	−11.8	44.4	−4.4
Nuttallburg	32.4[l]	+0.6	.....	.....	.....	.....	48.4[l]	−3.2	49.0	.....	61.4[c]	.....	.....	.....	.....	.....	.....	.....	.....	.....	39.4[g]	−4.7	.....	.....	.....	.....
Point Pleasant	33.4	−0.8	32.0	−1.2	42.8	−2.3	53.8	−1.1	58.0	−7.5	69.0	−3.7	74.0	−2.6	73.2	−1.5	64.4	−5.1	50.1	−7.2	40.8	−4.4	25.0	−10.2	51.4	−4.0
Powellton	37.8[e]	+0.8	35.4	+0.1	46.0	+0.4	56.1	+1.8	58.4	−5.7	69.8	−0.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Robertsburg	34.0[c]	−0.5	30.3	−2.4	42.4	−2.3	53.0	−0.1	57.2	−7.1	69.6	−1.7	74.6	−1.1	74.0	−0.4	65.6	−2.9	50.0	−7.2	39.3[b]	−4.1	23.8[a]	−10.6	51.2	−3.4
Ryan	32.1	−2.3	31.0	−2.1	41.2	−2.7	51.6[a]	−1.0	55.6	−7.0	67.6	−1.2	72.5	−0.9	70.8	−1.2	64.8	−1.4	50.4	−4.0	38.8	−4.6	25.4	−8.7	50.2	−3.1
Spencer	37.3	+3.0	35.0[e]	.....	48.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sutton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49.8	−9.4	40.4	−3.8	26.8	−6.9	.....	.....
Union	36.4[a]	+3.1	29.4[a]	−3.8	42.2[a]	−0.6	47.2[a]	−3.7	54.2[a]	−6.7	67.2[a]	+0.6	71.0[a]	0	72.2[a]	+1.7	63.2[b]	−1.9	49.2[a]	−4.2	40.7[a]	+0.4	22.2[b]	−9.6	49.6	−2.1
White Sulphur Springs	36.2	.....	32.7	.....	44.0	.....	52.9	.....	53.6	.....	66.8	.....	70.6	.....	69.5	.....	62.6	.....	49.7	.....	40.5	.....	24.8	.....	50.3	.....
Williamson	37.8	+1.2	33.7	−2.4	44.0	−3.0	56.2	−0.9	57.8	−8.2	70.0	−2.2	75.4	−0.5	74.5	−0.6	66.6	−3.2	50.7	−7.5	42.8	−2.5	27.4	−9.8	53.1	−3.3

Reference letters indicate number of days missing; [a] one day, [b] two days, etc.

Monthly and Annual Precipitation for the Year 1917, with Departures from Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
PANHANDLE DIVISION.																										
Bayard	6.39	+1.12	2.95	−0.57	4.33	−0.12	3.04	−1.03	5.10	+0.76	2.64	−2.43	4.95	+0.04	3.85	−0.71	3.78	+0.35	3.56	+0.15	0.64	−2.00	0.79	−3.24	42.02	−7.68
Brandywine	1.82	.....	2.50	.....	6.01	.....	2.08	.....	2.90	.....	1.38	.....	2.49	.....	2.16	.....	2.16	.....	3.31	.....	0.29	.....	0.81	.....	27.91	.....
Burlington	4.07	+1.76	2.35	+0.06	4.95	+1.85	2.62	−0.01	4.24	+0.44	2.12	−1.95	3.73	+0.12	3.65	+0.12	3.03	+0.18	2.90	+0.70	0.30	−1.44	0.80	−1.86	34.76	−0.03
Harpers Ferry	2.18	−0.65	1.83	−0.79	4.02	+0.91	2.50	−0.41	2.81	−0.91	3.05	−0.86	8.27	+4.94	4.54	+0.71	1.21	−1.63	6.19	+3.35	0.20	−2.04	1.20	−1.51	38.00	+1.11
Martinsburg	2.66	+0.15	2.13	−0.35	4.50	+1.29	2.53	−0.43	3.21	−0.54	3.58	−0.74	3.79	−0.16	5.58	−0.22	2.60	−0.21	6.08	+3.49	0.70	−1.43	1.35	−1.35	38.71	−0.50
Moorefield	2.52	−0.06	2.25	−0.25	3.72	+1.05	2.27	−0.54	2.95	−0.67	1.90	−2.41	1.25	−2.22	.....	.....	1.31	−1.33	3.46	+1.26	0.22	−1.40	1.30	−0.99	.....	.....
Piedmont	3.80	.....	2.46	.....	7.67	.....	2.53	.....	3.26	.....	2.25	.....	4.11	.....	5.53	.....	2.62	.....	2.17	.....	0.25	.....	0.79	.....	37.44	.....
Romney	3.16	+0.43	2.44	+0.17	4.05	+0.96	3.53	+0.88	.....	.....	3.52	−0.34	3.07	−0.45	4.90	+1.02	2.79	+1.30	3.38	+0.99	0.55	−1.41	1.30	−1.20	.....	.....
Upper Tract	1.72	−0.89	2.20	+0.48	4.75	+2.30	2.21	−0.13	.....	−0.07	1.60	−2.06	5.53	+1.87	2.30	−1.84	2.63	+0.25	2.60	+0.32	0.05	−1.59	1.30	−0.98	30.12	−2.34
Wardensville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.10	.....	.....	.....
NORTHERN DIVISION.																										
Bens Run	6.10	+1.63	2.56	−0.76	5.42	+1.16	4.97	+0.97	3.99	−0.46	4.80	+0.04	4.96	+0.35	4.71	+0.94	1.28	−1.11	6.28	+4.12	0.78	−1.79	1.34	−2.58	47.19	+2.51
Brandonville	5.73	.....	2.31	.....	4.20	.....	2.46	.....	4.40	.....	5.61	.....	4.99	.....	5.06	.....	3.80	.....	2.87	.....	.....	.....	.....	.....	.....	.....
Buckhannon	6.34	+1.86	4.51	+0.67	7.01	+2.52	3.16	−1.19	6.40	+2.02	4.09	−0.84	5.90	+0.60	4.37	+0.41	3.05	−0.09	3.57	+0.33	1.07	−2.30	1.70	−2.39	51.17	+1.60
Cortland	5.18	.....	3.39	.....	4.81	.....	2.12	.....	4.30	.....	3.29	.....	2.73	.....	2.35	.....	3.04	.....	3.33	.....	0.79	.....	1.50	.....	36.83	.....
Creston	4.55	+0.78	2.92	+0.03	7.21	+3.35	4.79	+0.84	6.02	+2.46	4.65	+0.06	6.57	+2.77	5.70	+2.56	3.54	+0.80	4.55	+1.86	0.72	−1.78	1.18	−2.09	52.40	+11.69
Davis	6.87	.....	4.03	.....	9.29	.....	2.92	.....	4.97	.....	3.43	.....	6.66	.....	1.58	.....	2.45	.....	5.17	.....	1.34	.....	2.04	.....	50.75	.....
Elizabeth	5.31	.....	2.36	.....	7.50	.....	4.55	.....	5.36	.....	3.95	.....	7.54	.....	4.06	.....	2.88	.....	6.04	.....	0.60	.....	1.07	.....	51.22	.....
Elkins	4.58	+1.24	3.73	+0.62	7.12	+3.05	2.72	−0.57	4.35	+0.37	3.52	−1.52	2.69	−1.95	3.26	−0.39	2.83	−0.04	2.97	+0.55	1.23	−1.63	1.17	−2.25	40.23	−2.52
Fairmont	5.19	+1.26	2.31	−0.70	5.50	+1.52	2.83	−0.68	4.03	+0.03	4.20	−0.39	4.13	−0.70	1.46	−2.01	1.62	−0.98	4.04	+1.45	0.60	−2.10	0.98	−2.48	36.89	−5.78
Glenville	5.03	+0.73	3.01	−0.78	8.17	+4.02	2.77	−0.96	6.65	+2.70	5.16	+0.81	4.09	−1.38	3.19	−0.73	2.99	−0.36	4.29	+1.39	0.92	−2.07	0.97	−2.77	47.24	+0.60
Grafton	4.49	+0.43	3.37	+0.02	4.66	+0.53	2.90	−0.84	4.60	+0.24	3.27	−1.41	6.95	+2.02	1.58	−2.42	1.16	−1.80	4.25	+1.45	0.60	−2.49	1.92	−1.71	39.69	−5.98
Lost Creek	4.26	+0.20	3.10	+0.16	4.22	+0.11	2.73	−0.70	4.85	+0.74	5.82	+1.89	4.97	+0.25	2.77	−1.34	2.17	−0.66	3.91	+1.39	0.62	−1.84	1.10	−2.43	40.52	−2.23
Mannington	5.25	+0.49	2.34	−0.30	5.22	+1.42	3.31	−0.73	4.44	+0.50	6.58	+2.56	5.43	+0.78	6.09	+2.63	1.30	−2.05	4.57	+1.90	0.61	−1.82	1.10	−2.29	46.24	+3.09
Morgantown	4.19	+0.26	1.97	−1.24	3.10	−0.71	1.29	−2.14	4.99	+1.40	3.63	−0.97	3.54	−1.61	3.60	−0.40	2.57	−0.54	4.30	+1.20	0.64	−2.25	0.83	−2.39	34.65	−9.39
Moundsville	3.49	+0.26	.....	.....	.....	.....	3.01	−0.10	.....	.....	3.90	+0.38	5.95	+1.43	8.80	+5.92	2.12	−0.43	5.85	+3.01	0.24	−1.46	1.22	−1.83	.....	.....
New Cumberland	4.22	+1.47	1.26	−1.26	4.25	+0.85	2.07	−1.46	3.06	−0.10	5.76	+1.09	4.30	−0.19	4.91	+1.67	2.77	+0.31	6.29	+3.57	0.20	−1.61	1.43	−1.13	40.53	+3.21
New Martinsville	4.98	+1.23	2.78	−0.26	4.47	+0.72	4.58	+1.03	3.40	−0.21	5.94	+1.95	5.35	+0.52	5.86	+2.56	1.41	−1.30	6.25	+3.66	0.85	−1.76	1.10	−2.52	46.97	+5.62
Parkersburg	5.71	+2.52	2.44	−0.80	4.46	+0.64	4.29	+1.38	5.06	+1.60	3.17	−1.48	6.17	+1.51	2.18	−1.35	1.41	−1.31	4.77	+2.33	0.60	−2.23	0.90	−1.87	41.16	+0.94
Parsons	5.23	+0.41	3.77	+0.32	3.53	−0.69	2.39	−1.51	5.13	+1.23	4.58	−1.00	3.45	−1.75	5.22	−1.44	1.96	−1.36	4.21	+1.47	0.87	−1.65	1.05	−2.73	41.39	−8.70
Philippi	4.63	+0.35	3.69	+0.32	6.26	+2.08	2.60	−1.34	6.05	+1.83	.....	.....	4.77	.....	2.90	−1.21	.....	.....	.....	.....	0.90	−1.94	.....	.....	.....	.....
Pickens	7.67	+1.11	7.73	+2.71	14.20	+8.64	4.20	−0.88	7.07	+2.07	4.80	−1.33	7.28	+1.01	2.10	−2.87	4.36	+0.37	5.25	+1.47	3.65	−0.16	3.07	−1.96	71.38	+10.18
Rowlesburg	6.04	+1.66	3.29	−0.09	7.22	+2.97	2.92	−1.11	7.28	+3.00	2.95	−1.96	5.22	+0.42	2.80	−0.96	4.57	+1.62	4.02	+1.14	1.29	−1.73	1.77	−2.07	49.37	+2.89
St. Marys	5.75	.....	1.93	.....	5.34	.....	5.31	.....	4.33	.....	3.48	.....	5.48	.....	4.15	.....	2.14	.....	6.06	.....	0.33	.....	1.40	.....	46.00	.....
Smithfield	6.66	+1.23	3.35	−0.28	4.98	+0.81	3.81	−0.01	4.53	+0.58	5.43	+0.80	7.67	+2.30	6.01	+1.77	1.59	−1.90	5.25	+1.90	1.05	−1.74	2.40	−1.66	52.73	+3.80
Terra Alta	4.15	−1.56	3.10	−0.92	4.06	−1.12	3.07	−0.90	5.70	+0.66	3.22	−4.59	4.73	−1.01	3.06	−1.80	2.72	−1.01	3.20	−0.18	0.70	−2.86	0.95	−4.70	38.66	−19.99
Wellsburg	3.30	−0.25	1.29	−1.78	3.17	−0.18	1.84	−1.26	3.08	−0.38	3.50	−0.96	4.51	−0.07	6.21	+2.65	1.85	−1.00	.....	.....	.....	.....	.....	.....	.....	.....
Weston	4.13	−0.05	3.05	−0.76	6.80	+2.37	3.00	−1.07	5.96	+1.71	4.25	−0.15	4.18	+0.90	3.80	−0.10	2.67	−0.34	3.67	+0.68	0.70	−2.60	1.25	−2.46	43.46	−1.87
Wheeling	4.81	+1.69	1.75	−0.84	4.22	+1.14	3.22	+0.11	2.45	−1.01	3.59	−0.30	8.17	+3.59	7.04	+3.58	2.05	−0.54	6.50	+4.07	0.38	−2.07	1.61	−1.38	45.79	+8.04
SOUTHERN DIVISION.																										
Bancroft	4.96	+0.75	3.72	+0.68	6.97	+3.10	2.82	−1.91	6.31	+2.30	4.65	+0.04	3.61	−0.74	2.38	−2.22	2.49	−0.37	4.97	+2.08	0.91	−1.61	2.09	−1.04	45.88	+1.96
Beckley	.....	.....	3.24	+0.08	8.90	+5.29	3.48	−0.54	5.09	+1.89	3.14	−0.89	3.87	−0.28	2.34	−0.75	3.12	+0.43	4.97	+2.58	3.10	+0.61	1.91	−1.10	.....	.....
Bluefield	4.17	+1.17	1.65	−1.48	1.72	−1.69	.....	.....	1.54	−2.19	2.10	−2.78	5.13	+0.64	2.84	−1.51	2.75	+0.03	3.74	+1.06	0.76	−1.69	2.57	−0.38	.....	.....
Camden-on-Gauley	5.74	.....	4.78	.....	13.55	.....	3.47	.....	8.45	.....	6.18	.....	7.03	.....	1.32	.....	1.74	.....	1.18	.....	2.40	.....	1.36	.....	57.20	.....
Charleston	5.29	+1.55	5.20	+1.69	8.26	+4.14	3.12	−0.52	5.71	+1.80	3.39	−1.13	5.08	+0.95	4.26	−0.06	3.65	+0.70	5.00	+2.34	1.65	−1.26	2.98	−0.31	53.59	+9.89
Clay	4.28	.....	3.98	.....	9.66	.....	2.86	.....	6.24	.....	3.33	.....	1.91	.....	0.94	.....	1.98	.....	3.96	.....	0.38	.....	1.69	.....	41.21	.....
Cuba	4.62	+0.89	2.65	−0.40	4.90	+1.32	5.23	+1.90	4.19	+0.80	4.66	+0.71	4.82	+0.69	1.93	−1.10	1.47	−0.93	.....	.....	0.52	−1.75	0.47	−2.75	.....	.....
Dam 19 O. R	4.80	.....	1.90	.....	5.18	.....	3.91	.....	5.26	.....	3.85	.....	4.65	.....	1.54	.....	2.16	.....	5.45	.....	0.68	.....	0.73	.....	40.11	.....
Dam 20 O. R	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.82	.....	2.31	.....	2.42	.....	5.48	.....	0.45	.....	0.78	.....	.....	.....
Dam 22 O. R	4.83	.....	3.36	.....	6.00	.....	4.39	.....	5.44	.....	4.25	.....	7.64	.....	1.49	.....	3.00	.....	4.86	.....	0.50	.....	0.59	.....	46.35	.....
Dam 26 O. R	4.46	.....	2.97	.....	7.15	.....	2.03	.....	4.02	.....	1.21	.....	5.38	.....	1.75	.....	1.68	.....	5.08	.....	0.78	.....	1.32	.....	40.83	.....
Dunlow	5.44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elkhorn	.....	.....	4.27	+1.13	7.94	+3.64	2.01	−1.59	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.31	+0.75	1.85	−0.73	3.20	+0.05	.....	.....
Evans	5.17	.....	3.39	.....	6.77	.....	3.29	.....	5.27	.....	3.90	.....	4.48	.....	3.60	.....	2.68	.....	5.77	.....	0.84	.....	1.79	.....	46.95	.....
Gary	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.38	.....	7.59	.....	6.17	.....	4.54	.....	3.11	.....	1.17	.....	1.42	.....	.....	.....
Green Sulphur Springs	5.03	+2.04	5.20	+2.64	8.00	+4.38	.....	.....	5.06	+1.65	4.50	+0.50	4.50	+0.71	.....	.....	.....	.....	.....	.....	.....	.....	2.40	−0.17	.....	.....
Hinton	3.28	+0.24	4.04	+0.94	8.47	+4.57	2.10	−1.66	3.86	+0.07	2.34	+1.77	5.02	+1.31	1.96	−1.80	4.94	+2.22	3.28	+0.88	0.72	−1.43	1.64	−1.19	41.65	+5.92
Holcomb	4.92	.....	4.73	.....	8.72	.....	2.62	.....	6.07	.....	4.80	.....	7.86	.....	1.84	.....	2.75	.....	4.68	.....	1.96	.....	1.75	.....	52.70	.....
Huntington	5.31	−1.63	3.88	−0.77	8.53	+4.25	2.58	−1.09	5.66	+1.71	4.60	+0.33	2.26	−2.11	5.57	+1.80	4.60	+2.25	4.66	+2.29	1.20	−1.50	1.78	−1.66	50.63	+3.87
Kayford	4.66	.....	4.75	.....	9.03	.....	3.24	.....	6.28	.....	5.09	.....	5.19	.....	3.42	.....	6.62	.....	3.51	.....	1.16	.....	1.84	.....	54.79	.....
Lewisburg	2.71	−0.58	4.07	+1.16	7.26	+3.28	2.13	−1.05	3.88	+0.15	2.09	−2.03	3.45	−0.38	2.95	−0.55	3.83	+1.08	2.26	−0.38	0.75	−1.52	1.53	−1.25	36.91	−2.07
Logan	.....	.....	4.03	.....	6.11	+1.09	.....	.....	5.43	+1.36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marlinton	4.63	+0.87	3.62	+0.19	9.40	+5.52	2.70	−0.41	4.09	+0.19	2.23	−2.58	7.22	+2.13	2.07	−2.34	3.37	+0.17	3.29	+0.43	0.94	−1.80	2.11	−1.05	45.67	+1.32
Nuttallburg	.....	.....	.....	.....	.....	.....	1.83	−1.47	5.38	+1.77	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.61	−1.83	2.53	−0.35	.....	.....
Point Pleasant	5.48	+1.69	3.62	+0.03	6.84	+2.74	3.14	−0.14	6.13	+2.36	4.59	+0.22	4.68	+0.66	1.82	−1.44	3.78	+1.50	5.16	+2.66	0.69	−2.11	1.38	−1.84	47.31	+6.33
Powellton	.....	.....	5.05	+2.08	7.18	+2.64	2.20	−1.40	7.34	+3.45	4.62	−0.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rainelle	.....	.....	.....	.....	.....	.....	2.88	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Raleigh	5.40	.....	4.00	.....	9.35	.....	2.35	.....	3.14	.....	2.51	.....	4.40	.....	2.07	.....	5.77	.....	3.83	.....	1.36	.....	1.78	.....	45.96	.....
Renick	4.62	.....	3.34	.....	8.25	.....	3.51	.....	2.64	.....	2.89	.....	2.43	.....	3.00	.....	2.80	.....	3.43	.....	0.38	.....	0.81	.....	37.80	.....
Robertsburg	4.96	+1.08	2.91	−0.30	6.59	+2.58	2.82	−0.96	5.78	+2.22	4.53	+0.81	4.23	+0.36	2.53	−0.84	1.72	−0.68	4.18	+1.53	1.16	−2.45	1.21	−2.40	42.62	+0.95
Ryan	4.81	+0.67	4.61	+1.16	7.82	+3.66	3.45	−0.37	6.68	+3.18	4.35	−0.02	3.77	−1.03	2.88	−1.06	2.20	−0.68	5.19	+2.06	1.25	−1.24	1.56	−1.88	48.57	+4.45
Sissonville	4.28	.....	3.31	.....	8.35	.....	2.84	.....	5.48	.....	3.41	.....	4.49	.....	1.37	.....	2.53	.....	.....	.....	0.93	.....	.....	.....	.....	.....
Spencer	5.30	+1.01	1.95	−1.18	6.20	+2.52	.....	.....	7.30	+3.72	2.80	−1.71	2.95	−1.50	5.54	+2.13	1.55	−1.63	.....	.....	.....	.....	.....	.....	.....	.....
Sutton	.....	.....	.....	.....	.....	.....	.....	.....	7.00	+2.81	3.15	−2.64	4.40	−0.48	2.25	−1.51	3.60	+0.27	3.78	+0.65	1.37	−1.33	2.37	−1.36	.....	.....
Union	2.75	−0.91	5.10	+2.53	8.00	+4.49	2.00	−1.00	3.60	+0.98	2.64	−1.46	3.27	−1.26	3.10	−1.75	2.75	−0.06	3.03	+0.32	0.40	−1.62	1.98	−0.45	38.62	−0.19
White Sulphur Springs	3.07	.....	3.85	.....	7.55	.....	2.55	.....	4.15	.....	1.70	.....	6.60	.....	2.05	.....	4.40	.....	3.85	.....	0.30	.....	3.32	.....	43.3	.....
Williamson	5.38	+1.38	4.75	+1.53	9.20	+4.96	3.04	−0.94	3.82	+0.01	3.78	−1.06	2.94	−1.66	3.90	−0.08	1.93	−1.98	3.80	+1.27	1.00	−1.67	2.52	−1.41	49.1	+4.31
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Monthly Maximum Temperatures for the Year 1917, with Dates.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date	Minimum.	Date.	Minimum.	Date.	Minimum	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
PANHANDLE DIVISION.																								
Bayard	61	31	64	26	72	31	79	20	79	19†	85	26	86	1	87	1	79	1†	73	29	59	12	45	3
Brandywine	59	31	69	26	80	31	85	20	87	19	93	26	96	31	97	1	89	2	80	15	68	12†	55	21
Burlington	56	3†	72	26	80	31	86	20	87	18†	91	26	96	31	99	1	87	2	.....	.....	67	18	53	24†
Martinsburg	60	10	68	26	84	31	85	1†	92	18	93	26†	101	31	98	2	89	2	79	15	69	10	45	1†
Moorefield	64	31	75[b]	25	85	31	90	19†	95	18	99	26	104	30†	102[p]	1†	98	2	85	15	73	12	54	20
Piedmont	57	22	74	26	78	31	87	20	87	19	93	26	94	31	96	1	86	1†	79	18	68	12	51	21
Romney	59[a]	8†	74[a]	26	80	31	85	1	.....	.....	97	26	100	31	102	1	92[a]	2	89	15	71[f]	11†	58	1
Upper Tract	60	5†	70	26	.....	.....	86[a]	20	90[a]	18	93[a]	27	94	30†	95	1	87	1†	77[c]	1	68[g]	13	56[b]	21
Wardensville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTHERN DIVISION.																								
Bens Run	71	31	69	26	79	31	86	20	87	19	92	26	95	25	99	5	86	15	81	17†	67	6	52	20†
Buckhannon	70	31	73	26	76	31	83	19	84	19	88	26	89	31	90	1	83	2†	78	18	63	13	52	3
Creston	74[f]	31	76	26	76	31	89	20	91	19	90	13†	96	31	96	1	87	1	82	18	66	6	56	24
Elkins	70	31	72	26	78	31	84	20	84	19	90	26	90	31	91	1	83	2	77	18	64	12	52	3
Fairmont	72	31	71	26	79	31	86	19†	88	19	94[a]	26	96	6†	97	1†	90	2	85	17†	69	12	51	18†
Glenville	76	31	76	26	83	31	90	20	90	19†	97	26†	98	7†	100	21	91	2†	88	18	70	6	54	3
Grafton	68[b]	31	66	1	79	31	78	19	78[d]	21†	90	26†	95	30	93[b]	1†	89	2	84	17	67	13	51	24
Lost Creek	71	31	71	26†	78	31	85	20	87	19	90	26	93	31	95	1	88	1	83	18	66	6	53	3†
Mannington	71	31	70	26	78	31	83	19	85	18†	89	26	90	30†	91	1	84	2	82	18	67	6	51	20†
Morgantown	69	31	69	26	76	31	83	19	84	19	94	26	95	31	95	1	90	1	83[b]	18	65[a]	6	50	24
Moundsville	71	31	70	1	77	31	90	19†	.....	.....	95	13	95	6†	95	1	85[a]	13	81[a]	17	66[a]	5	52[a]	20†
New Cumberland	60	31	62	26	76[a]	31	85	19	86	18	89	26	94	31	94	1	85	2†	80[a]	18	70	6†	48	24
New Martinsville	70	31	68	1†	80	31	86	20	87	19	90	26†	96	31	98	1	87	2†	83	18	67	6	53	3
Parkersburg	72	31	72	26	80	31	86	20	86	19	93	26	94	31	94	1	87	2	81	17	67	6	52	3
Parsons	71	31	72	26	75	31	82	19	84	19	89	25	90	31	91	1	82	1†	81[e]	17	67	12	48	21†
Phillippi	73	31	80	26	80	31	86	20	89	22	98	28	92	31	94	1	.....	.....	.....	.....	66	12	.....	.....
Pickens	63	31	69[b]	26	79[a]	31	86	20	90	19	92	13	85[a]	31	86	19†	80	2	88	18	68[a]	5	58	18
Smithfield	70	31	70	26	80	31	87	19	89	19	92	26	98	24	94	1	86	2	83	18	69	12	52	20
Terra Alta	66	31	65	26	72	31	79	20	80	19	84	26	85	31	87	21	79	2	77	18	61	12	46	21
Wellsburg	58	31	65	1	73	31	79	20	82	19	85	26	89	31	89	1	87	15	.....	.....	.....	.....	.....	.....
Weston	72	31	75	26	78	31	84	20	87	19	91	26	94	30	93	1	85	1†	82	17†	67	12	54	3
Wheeling	61	31	68	26	80	31	88	19†	91	19	95	26	102	31	101	1	91	1	82	18	70	6†	50	24
SOUTHERN DIVISION.																								
Bancroft	76	31	77	26	82	31	89	20	89	20	92	26	94	31	94	1	86	2	82	17†	65	10†	58	3
Beckley	.....	.....	75	26†	79	14	83	19	84	21	90	26	92	30	88	1†	85	1	81[a]	18	.....	.....	60[r]	21†
Bluefield	68	31	70	26	80[e]	19	.....	.....	82	19†	86[a]	26†	88[a]	31	88[a]	1	82[a]	7	75	16†	67	6	56[a]	3†
Charleston	77	31	78	26	84	31	90	20	93	19†	99	26	98	31	98	1	91	2	80	29	69	10	65	23
Clay	66[a]	5	75[a]	26	85	31	86	20	90	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuba	74	31	75	26	82	31	88	20	88	18†	95	27	96	31	98	1	85	2	.....	.....	70	6	57	18
Elkhorn	.....	.....	68	26†	69	31	79	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75	17	63	7	57	3
Evans	68	31	68	26	78	31	84	19	86	20	90	26	92	31	92	1	87	2	82	18	70	6	56	3
Green Sulphur Springs	70	31	76	26	78	31	.....	.....	87[a]	19†	94	26	94	31	.....	.....	.....	.....	.....	.....	.....	.....	50	2†
Hinton	65	31	74	26	78	31	85	19†	89	21	95	26	95	30	95	2	88	2	80	16	68	4	54	1
Holcomb	70	31	75	26	71	31	82	19	86	19	92	26	91	31	92	1	86	2†	78	18	68	11	50	2†
Huntington	73	31	75	26	80	31	89	19	91	19†	97	26	98	31	99	1	86	1†	79	18	66	6	58	3
Lewisburg	65	31	72	26	75	31	83	19†	83	19†	89	26	90	31	92	1	86	2	77	16	64	7	51	2†
Marlinton	56	31	66	26	70	31	78	20	80	20	86	26	86	31	84	1	80	2	70	15†	60	12	44	2†
Nuttallburg	63[j]	31	.....	.....	.....	.....	78[i]	.....	72[j]	17	82[g]	5†	.....	.....	.....	.....	.....	.....	.....	.....	57[g]	9	.....	.....
Point Pleasant	73	31	75	26	82	31	89	20	90	20	95	26	96	31	97	1	91	2	85	17	71	6	57	3
Powellton	75[e]	31	76	26	82	31	89	20	91	20	95	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Robertsburg	74	31	75	26	81	31	87	20	88	18†	95	26	94	6†	96	21	90	2	85	17	70[b]	6	58[a]	3
Ryan	76	31	76	26	81	31	87	20	87	20	90	22†	95	30†	95	1	87	1†	85	18	70	11	60	3
Spencer	68	26	73[e]	26	76	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sutton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84	15†	60	20†	51	3†
Union	68[a]	1	72[a]	25	.....	.....	77[a]	29	86[a]	20	92[a]	25	93[a]	29	93[a]	1	87[b]	2	79[a]	16	78[a]	10	62[b]	4
White Sulphur Springs	69	31	73	26	77	31	86	19	89	18	90	27	94	31	94	1	86	2†	81	18	68	7†	67	3
Williamson	74	31	78	26	80	31	87	19†	88	19†	92	27	94	29†	96	1	89	2	84	17	67	6	57	24

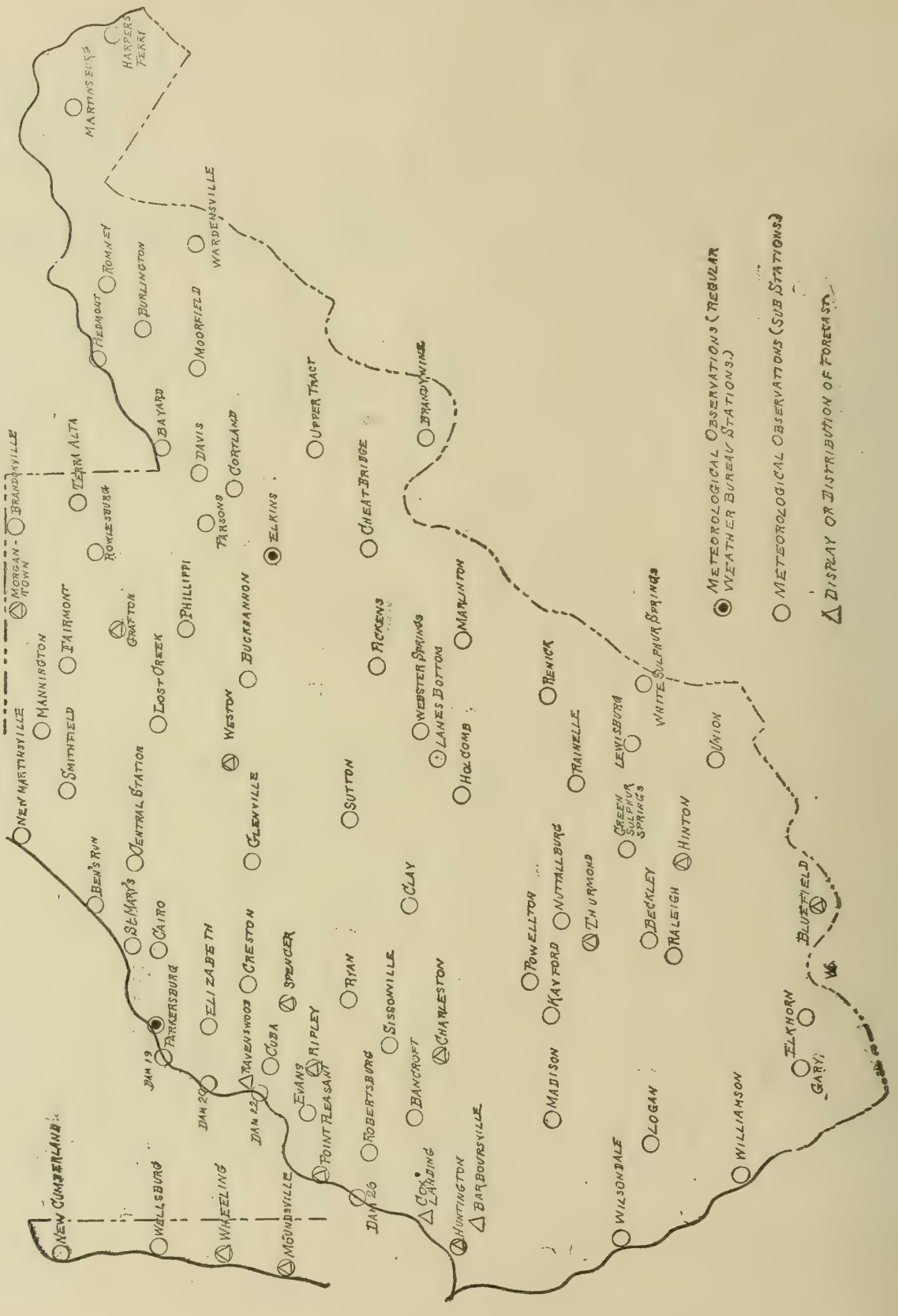
Reference letters indicate number of days missing; [a] one day, [b] two days, etc.
† Also other dates.

Monthly Minimum Temperatures for the Year 1917, with Dates.

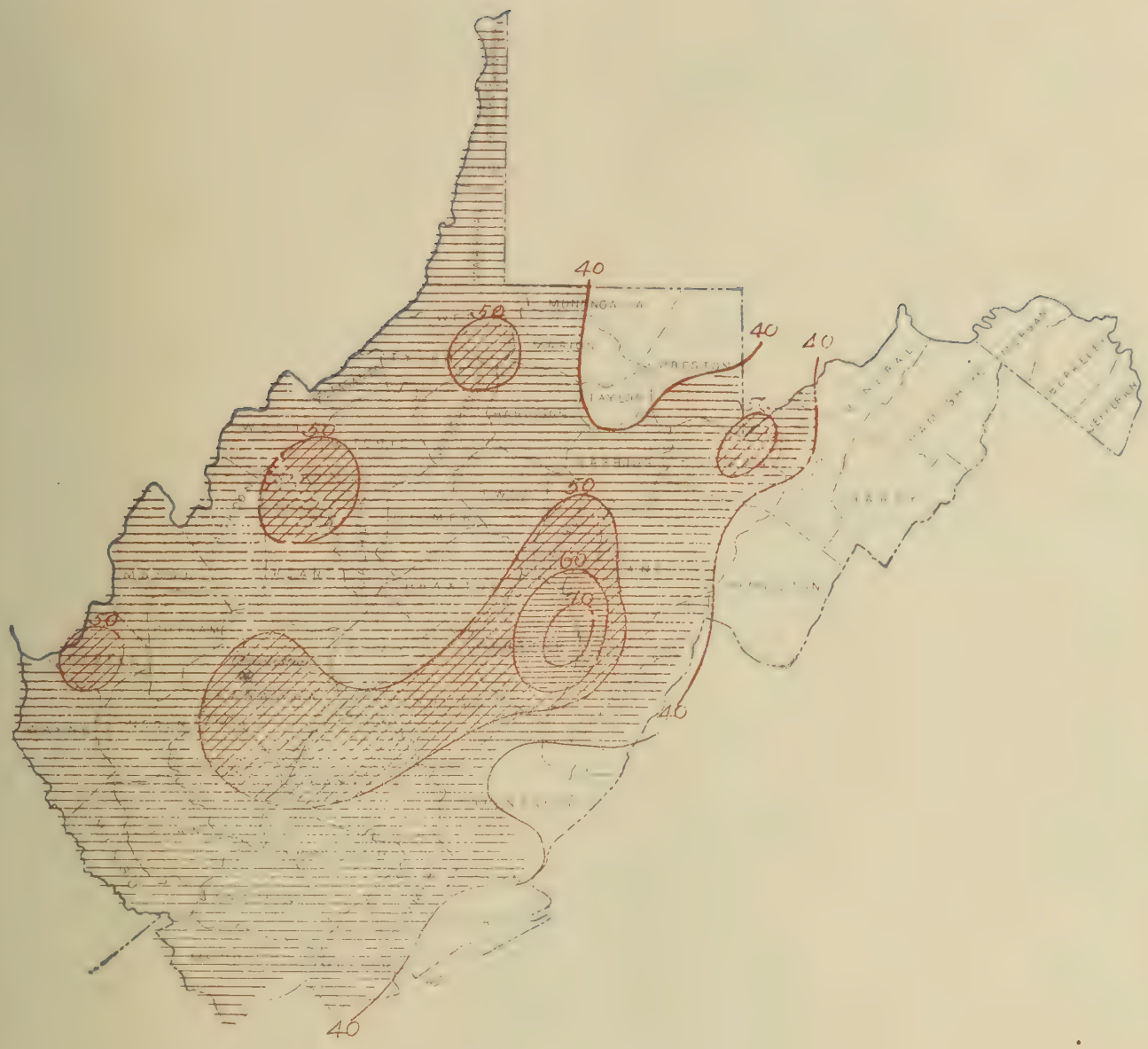
Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
PANHANDLE DIVISION																								
Bayard	0	12	-14	5	2	6	15	9	31	12†	35	17	49	5	43	19†	23	11	17	21	8	25†	-18	30
Brandywine	7	12	— 5	5†	3	6	21	14	31	26	34	17	47	1	39	26	30	12	18	31	11	25	-28	30
Burlington	5	15	— 5	13	8	7	23	14	33	26	40	17	53	4†	51	18	32	11	.....	.....	13	27	—16	30†
Martinsburg	12	12†	— 1	13	17	7	26	9	37	11†	48	17†	60	5	49	26	32	11	26	31	18	27	— 4	30
Moorefield	5	17	- 4[b]	13	5	6	22	14	32	10†	39	16	52[b]	1	.....	.....	34[a]	11	21[b]	14	15[a]	27	-26	30
Piedmont	7	15	— 5	5	11	7	23	9	34	11	39	11	52	5†	45	26	39	11†	23	21	15	27	— 8	30
Romney	8[a]	14†	— 6[a]	13	13[i]	.....	20	9	.....	.....	38	17	53	5	45	26	31[a]	11	20	21	13	27	-15[c]	30
Upper Tract	10[b]	13	— 5	5	8[b]	6	21[a]	14	34[a]	6†	36[a]	17	49	4†	42	26†	33	11†	20[c]	25†	15[b]	27	-25[b]	30
Wardensville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTHERN DIVISION																								
Bens Run	3	15	— 6	5	7	6	26	9†	34	10	43	17	56	5	49	26	39	11	28	26†	14	24	— 7	11
Buckhannon	2	12	— 6	5	6	6	22	10	31	10	39	17	51	5	42	26	34	11	25	21†	3	25	—28	30
Creston	2[f]	15	— 5	5	5	6	21	10	30	10	41	17	54	5	45	26	38	11	27	26	12	25	—17	30
Elkins	3	12	—10	5	12	6	21	9	32	26	36	17	49	5	41	26	34	12	21	21	12	26	—28	30
Fairmont	5	12†	— 6	5†	8	6	22	9†	33	10†	41	16	55	5	45	26	36	11	27	14	10	25	—13	30
Glenville	— 1	17	— 5	5	5	6	20	10	30	10	41	16†	55	4†	47	26	36	11	25	21	7	25	—25	30
Grafton	1[b]	12	— 6	5	7	6	19	10	33[a]	11	42	17	53	5	44[b]	26	35	11	25	21	9	25	—20	30
Lost Creek	— 3	17	— 7	5†	4	6	18	10	25	14	37	17	49	5	39	26	32	11	20	26	8	25	26	30
Mannington	— 3	17	— 6	5	0	6	19	9	30	10	40	16†	51	5	42	26	33	11	25	14†	4	25	—21	30
Morgantown	2	12	— 8	5	12	6	17[f]	9	31	26	40	17	52	5	45	26	34	11	29[c]	24	12[a]	25	—13	30
Moundsville	2	17	— 7	13	4	6	21	10	.....	.....	40	16†	55	3	45	26	36	11	28	26†	10	25	—10	30
New Cumberland	— 9[g]	15	-10	13	5[a]	6	21	9†	31	3	37	17	47	4	44	26	33	25	25[a]	14†	15	8†	-15	30
New Martinsville	— 1	15	— 6	5	5	6	23	10	31	10	43	16	52	6	48	26	37	11	28	14†	10	25	—11	30
Parkersburg	4	17	— 6	5	7	6	26	14	34	10	41	17	57	3	49	26	40	12	29	30	20	25	—10	30
Parsons	— 1	11	— 8	5	5	6	18	10	29	10†	39	16	49	4	42	26	33	11	19[c]	22	0	25	—26	30
Philippi	— 1	15	—11	5	4	6	18	9	32	26	.....	.....	45	13	.....	.....	.....	.....	.....	.....	8	25	.....	.....
Pickens	— 7	12	—12[b]	5†	10[a]	19	13[d]	8†	29	10	35	17	50[a]	4†	41	26	32	11	20	31	4[a]	25	—20	30
Smithfield	0	15†	— 7	5	3	6	19	10	30	19	40	17	51	5	45	26	34	11	26	14†	3	25	—16	30
Terra Alta	— 1	15	—14	5	7	6	15	9	31	3†	35	17	51	22	43	26	30	11	19	31	8	27	—18	30
Wellsburg	0	15	— 6	13	10	6	20	9	33	3	40	16†	51	4	47	26	34	11	.....	.....	.....	.....	.....	.....
Weston	3	17	— 5	5	5	7	23	10	31	10	41[d]	17	52	3	45	26	37	11	26	26	10	25	—20	30
Wheeling	— 2	15	— 7	5†	6	6†	23	9	32	10†	40	16	54	5	45	26	35	11	27	31	12	25	— 9	30†
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SOUTHERN DIVISION																								
Bancroft	4	12	— 5	5†	10	6†	22	10	33	10	42	17	55	4	48	26	38	11	26	31	15	25	—19	30
Beckley	.....	.....	— 5	5	8	6	24	10†	38	6†	36	16	49	10	42	25	36	10†	25[a]	22†	11	25	—20	30
Bluefield	5	12	— 8	5	26[e]	9†	.....	.....	35	5†	31[a]	17	52[a]	5†	15[a]	27	37[a]	11	20	31	15	25	-25[a]	30
Charleston	7	12	— 2	5	10	6	25	10	37	10	43	17	57	5	52	26†	41	11†	29	25	22	25	—17	30
Clay	6[a]	12	— 3	6	10	6	25	14	34	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuba	— 8	15	— 6	5	— 1	6	10	10†	.....	.....	40	17	52	13	43	26	35	11	.....	.....	10	25	—22	30
Elkhorn	.....	.....	— 5	5	9	6	23	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23	31	15	25	—17	30
Evans	0	15	- 2	5	6	6	26	10	32	10	45	16†	53	11	55	18	37	11	29	7	19	25	—22	30
Green Sulphur Springs	3	12	— 7	5	13	6	.....	.....	32[a]	10	44	18†	60	1†	.....	.....	.....	.....	.....	.....	.....	.....	-22	30
Hinton	6	12	— 4	5	15	6	25	10	33	10	41	17	54	4	48	27	41	11	21	31	18	25	—13	30†
Holcomb	— 2	12	— 7	5†	8	6	20	10†	29	10	33	17	47	4†	42	27	32	12	23	22	7	26	—22	30
Huntington	9	14†	— 4	5†	9	6	26	9	36	10	.....	.....	59	13†	50	26	43	11	29	31	22	24	—14	30†
Lewisburg	3	15	— 9	5	14	6	19	11	34	7	34	17	49	1†	39	26	33	11	21	31	16	21	- 5	30
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marlinton	2	12†	—10	3†	10	6	20	4†	28	10	34	17	44	5	40	26	30	12	16	31	10	27	—24	30
Nuttallburg	5[i]	15	.....	.....	.....	.....	21[i]	16	34[i]	11	37[g]	17	.....	.....	.....	.....	.....	.....	.....	.....	10[g]	26	.....	.....
Point Pleasant	— 5	15	— 8	5	2	6	21	14	30	10	41	17	53	5†	44	26	34	11	26	26†	16	25	-19	30
Powellton	6[e]	12	— 2	5	12	6	21	17	35	9	41	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Robertsburg	7[e]	20	— 5	5	7	6	23	10	33	10	42	17	57	5	47	26	36	12	28	26†	16[b]	25	—22[a]	30†
Ryan	— 5	17	— 6	5†	0	6	20[a]	10	29	10	38	17	52	5	39	26	31	11†	24	14†	10	25	—27	30
Spencer	— 4	16	— 7	5	— 3	6	18	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sutton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	12†	11	25	—21	30
Union	2	12	- 7	5	14	6	24	13†	35	9†	37	17	50	1†	40	26	35[a]	11†	21	31	15	25	—34[a]	30
White Sulphur Springs	4	12	— 6	5	10	6	23	11†	32	14	35	17	48	2†	40	27	34	12	19	21†	14	26	—34	30
Williamson	10	12	0	5	14	6†	28	10	38	14	46	17	60	4†	52	26	44	11	25	31	20	25	—13	30†
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Reference letters indicate number of days missing: [a] one day, [b] two days, etc.
† Also other dates.

CHART SHOWING LOCATION OF OBSERVATION AND FORECAST DISPLAY STATIONS



TOTAL ANNUAL PRECIPITATION 1917



SCALE OF SHADES—INCHES.

Less than 40 | 40 to 50. | 50 to 60. | More than 60.

COOPERATIVE STATIONS AND OBSERVERS

Station.	Observer.
Bancroft	R. E. Dent
Bayard	G. C. Dixon
Beckley	John A. Ewart
Bens Run	J. D. Riggs
Bluefield	Norfolk & Western Railway Co.
Brandonville	W. T. Miller
Brandywine	Elmer Keister
Buckhannon	H. A. Darnall
Burlington	J. W. Vandiver
Cairo	J. E. Overton
Camden-on-Gauley	Miss Katie Jarvis
Central Station	D. H. Doak
Charleston	C. V. Lewis
Clay	Prof. E. H. Knabenshue
Cortland	Samuel Harmon
Cheatbridge	J. D. Wilmoth
Creston	*J. M. Reed
Cuba	Miss Faythe Howard
Dam 19, O. R	*Lockmaster
Dam 20 O. R	Lockmaster
Dam 22, O. R	*U. S. Engineer Office
Dam 26, O. R	*U. S. Engineer Office
Davis	Ross C. Male
Elizabeth	E. D. Ball
Elkhorn	I. J. Lincoln
Elkins	U. S. Weather Bureau
Evans	B. F. Sayre
Fairmont	*F. P. Hall
Glenville	*Howard R. Brannon
Grafton	W. C. Byers
Green Sulphur Springs	W. H. Gwinn
Harpers Ferry	*S W. Lightner
Hinton	*J. B. Lavender
Holcomb	R. C. Ferguson
Huntington	*L. H. Hutchinson
Kaytord	**Cabin Creek Con. Coal Co.
Lewisburg	George T. Argabrite
Logan	C. & O. Ry.
Lost Creek	Allen Smith
Madison	S. E. Bradley
Mannington	Jas. A. Morgan
Marlinton	S. L. Brown
Martinsburg	G. W. Van Metre
Moorefield	M. S. Henkel
Morgantown	R. W. Muldoon
Moundsville	M. Z. White
New Cumberland	M. F. Smith
New Martinsville	Wm. Ankron
Nuttallburg	Miss Donna Tully
Parkersburg	U. S. Weather Bureau
Parsons	J. W. Swisher
Philippi	Okey J. Robinson
Pickens	Dr. J. L. Cunningham
Piedmont	C. A. Suter, Jr.
Point Pleasant	*W. D. Holmes
Powellton	S. C. Lamper
Rainelle	**C. N. Bobbitt
Raleigh	**Raleigh Coal & Coke Co.
Renick	**W. B. Hil
Robertsburg	E. C. Brace, Jr
Romney	Geo. E. Arnold
Rowlesburg	*J. F. Pierce
Ryan	W. E. Ryan
Saint Marys	*William Hughes
Sissonville	J. N. Johnson
Smithfield	**G. M. Whisler
Spencer	A. M. McKown
Sutton	C. B. Eakle
Terra Alta	A. F. Wilhelm
Union	J. M. Shanklin
Upper Tract	J. M. Mallow
Wardensville	Luther F. Sutton
Wellsburg	C. P. Waugh
Weston	State Hospital
Wheeling	*Miss M. B. Forsyth
White Sulphur Springs	J. M. Ayre
Williamson	*J. F. Keyser

* River Observer. ** Special Rainfall Observer.

FORECAST DISTRIBUTORS AND DISPLAYMEN

[By Cards, Maps and Flags]

Station.	Distributor.
Bluefield—5	Norfolk & Western Railway Co.
Buckhannon*	Postmaster
Charleston—48*	Assistant U. S. Engineer
Elkins—295†	Weather Bureau Office
Grafton—60	Postmaster
Hinton—22	J. B. Lavender
Morgantown—23	Postmaster
Parkersburg—429†	Section Center
Point Pleasant—48	Miss Grace Henson
Ripley*	B. R. Parson
Weston—46	Postmaste

Figures represent number of places supplied with forecast cards.

* Flag display station. † Forecast cards and maps.

[By Telephone Companies.]

Arbuckle & Ripley Tel. Co.
Barboursville Tel. Co.
Beverly & Marlinton Tel. Co.
Bluefield Tel. Co.
Chesapeake & Potomac Tel. Co.
Citizens United Tel. Co.
Durbin Tel. Co.
Eastern Pendleton Tel. Co.
Enterprise Tel. Co.
Greenwood Tel. Co.
Peoples Tel. Co.
Ravenswood Tel. Co.
Union Ridge & Ohio Valley Tel. Co.

NW E

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

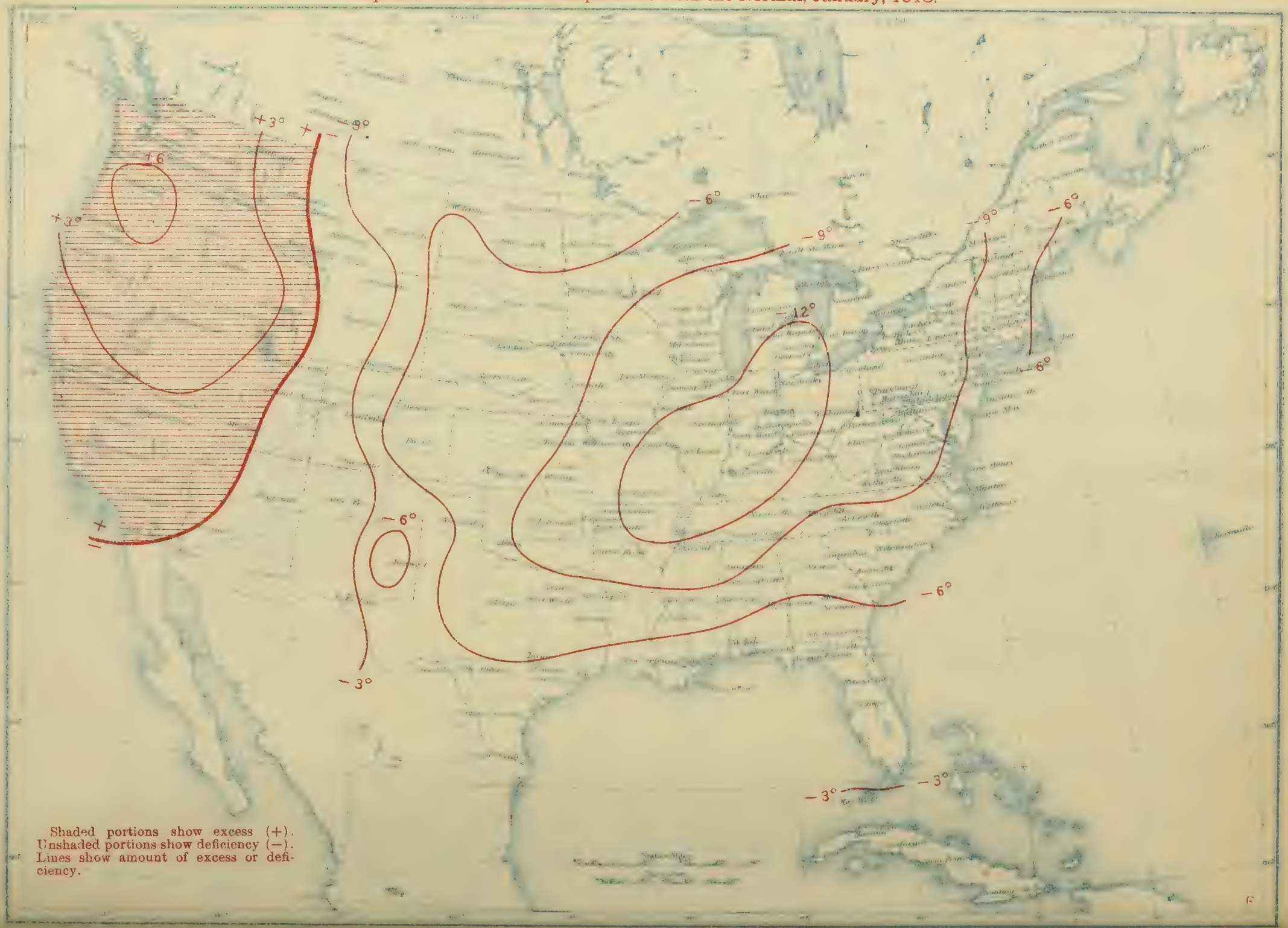
WEST VIRGINIA SECTION

JANUARY, 1918

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
FEBRUARY 26, 1918

Departure of the Mean Temperature from the Normal, January, 1918.



Shaded portions show excess (+). Unshaded portions show deficiency (−). Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXVI. PARKERSBURG, W. VA., JANUARY, 1918. No. 1.

GENERAL SUMMARY.

January, 1918, was by far the coldest month of record for West Virginia, the average temperature, 20.7°, being 1.9° below the average for the cold January in 1893, the second coldest month of record for the State. The month was characterized by continued cold weather, the temperature being above the normal for only three or four days. In comparison with other long cold periods of record, the period from September 1, 1917, to February 1, 1918, was a record-breaker. September was the coldest September of record, October was the coldest October since 1895, only three Novembers of record were colder than November, 1917, the average temperature for December was the lowest of record for December, while, as noted above, January was the coldest month of record. The precipitation was mostly snow or sleet and averaged slightly above the normal, with a favorable distribution throughout the State and during the month. Owing to a good snow-cover, the conditions were favorable for winter grains, which were generally fair to good at the close of the month.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 29.97 and 29.96 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.52 inches on the 21st, and 28.81 inches on the 11th. Elkins, 30.57 inches on the 21st, and 28.87 inches on the 12th.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 20.7°. The departure from the normal for 40 stations having ten or more years of record was —12.3°. The month opened with the temperature about 20° below the normal and exceptionally low temperatures also prevailed from the 12th to the 14th and the 19th to the 23d. The temperatures were nearly normal or slightly above on the 6-7th, 25-26th, and 28th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 88 per cent; 8 p. m., 77 per cent. The January averages for the same hours for the past 29 years are 83 and 78 per cent, respectively. Elkins, 8 a. m., 90 per cent; 8 p. m., 81 per cent. The January averages for Elkins for the same hours for the past 18 years are 85 and 79 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 62 stations reporting, was 4.24 inches. The departure from the normal for 43 stations having ten or more years of record was +0.32 inch. Light to moderate snowfalls were received in most sections on the 2d, 14-15th, 17-18th, 22d, and 30th, while there were light to moderate rains on the 6-7th, 11-12th, and 26-28th. Heavy sleet fell in many sections on the 27-28th.

WIND.

The average wind velocity at Parkersburg was 4.6 miles per hour, or 2.1 miles below the January average for the past 28 years. The average at Elkins was 6.9 miles per hour, or 1.9 miles above the January average for 18 years. The highest velocity at Parkersburg was 26 miles per hour from the southwest on the 12th, and at Elkins 38 miles per hour from the west on the 15th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 25 per cent of the possible amount, or 3 per cent below the January average for 20 years. The average at Elkins was 26 per cent, or normal as compared with the January average for 18 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Dam No. 26, 1st; Fairmont, 3d and 4th; Mannington, 31st; Morgantown, 31st; New Cumberland, 5th and 21st; Pickens, 27th; Smithfield, 31st; St. Marys, 3d and 5th; Wheeling, 1st, 3d, 4th, 5th, 11th, 20th, and 30th; Williamson, 5th, 6th, 10th, and 16th.

Hail: Camden-on-Gauley and Holcomb, 11th.

Sleet: Bancroft, 6th; Bayard, 7th, 12th, 27th, 28th and 29th; Bens Run, 26th; Brandywine, 7th, 12th, 27th, and 28th; Burlington, 7th; Charleston, 26th, 27th, and 28th; Creston, 28th; Elkins, 14th; Evans, 29th and 30th; Fairmont, 26th; Hinton, 12th; Holcomb, 11th, 14th, and 30th; Huntington, 26th; Lewisburg, 28th; Mannington, 27th and 28th; Marlinton, 11th, 12th, and 28th; Moorefield, 7th, 27th, and 28th; Moundsville, 6th and 27th; Parkersburg, 27th; Piedmont, 7th and 11th; Romney, 12th, 27th, and 28th; Ryan, 27th, 28th, and 30th; Smithfield, 26th and 27th; Terre Alta, 29th and 30th; Wheeling, 26th; White Sulphur Springs, 11th, 12th, 15th, and 28th

Thunderstorms: Camden-on-Gauley and Holcomb, 11th.

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	31.7	..	....	3.64	....	. ..	...	..	..	..
1892	29.4	76	— 3	3.15	....	....	....	..	..	..
1893	22.6	71	—25	2.49	....	....	....	7	7	17
1894	36.6	70	— 8	2.41	4.23	0.83	....	12	8	11
1895	25.0	69	—21	4.48	6.53	2.37	....	6	9	16
1896	32.4	72	— 6	1.57	2.72	0.67	1.8	9	14	8
1897	28.8	69	—18	1.70	2.85	0.90	4.0	10	7	14
1898	37.1	75	— 5	5.10	8.04	2.24	5.0	6	9	16
1899	32.1	70	—21	4.05	7.01	2.05	7.5	10	7	14
1900	34.5	74	—10	2.24	3.60	0.82	1.9	9	8	14
1901	33.6	69	— 1	2.41	3.87	1.18	7.3	8	7	16
1902	30.2	64	— 1	3.65	8.52	1.45	9.8	9	7	15
1903	31.8	79	— 7	3.21	6.45	1.55	8.6	8	7	16
1904	27.5	72	—18	2.72	5.82	1.24	10 8	9	8	14
1905	26.4	70	—14	3.15	7.43	1.48	22.0	7	7	17
1906	38.2	80	— 5	3.79	8.70	1.36	5.1	11	7	13
1907	38.7	76	—15	6.41	11.54	2.35	5.6	6	7	18
1908	31.0	62	—16	2.92	8.19	0.50	12.8	12	7	12
1909	36.8	76	— 5	3.41	6.59	1.50	8.7	8	6	17
1910	32.0	67	— 5	5.68	10.10	2.52	15.4	6	6	19
1911	37.3	71	— 5	5.86	12.63	3.11	7.0	8	6	17
1912	23.5	66	—34	2.60	6.93	1.10	13.6	7	8	16
1913	40.7	74	9	6.23	10.53	1.84	5.7	9	6	16
1914	35.8	83	—11	3.18	5.65	1.55	15.6	7	3	18
1915	31.7	68	— 8	4.85	11.38	2.00	10.4	8	6	17
1916	38.8	79	—10	4.86	8.52	1.70	6.1	11	7	13
1917	33.2	77	— 9	4.66	7.67	1.72	8.3	11	6	14
1918	20.7	55	—27	4.24	9.22	2.00	21.5	8	5	18
Means and extremes ..	32.1	83	—34	3.74	12.63	0.50	9.3	9	7	15

Climatological Data for January, 1918.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	17	15.6	−13.4	40	15†	−12	3	30	2.00	−3.34	0.60	41.8	19	6	3	22	w.	G. C. Dixon.
Brandywine	Pendleton		2	20.4	.....	43	24†	−20	21	49	3.94	.....	1.30	18.8	9	17	2	12	n.	Elmer Keister.
Burlington	Mineral	875	24	19.0	−12.2	43	25	−21	21	43	2.95	+0.31	0.70	29.0	10	7	17	7	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	29	.....	.....	.....	.....	.....	.....	.....	3.40	+0.60	1.50	22.5	5	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	26	19.1	−11.9	42	25	− 4	21	31	4.96	+2.44	1.58	36.8	8	15	3	13	n.	G. W. Van Metre, C. E
Moorefield	Hardy	900	22	20.2	−12.2	43	25†	−24	15	64	3.95	+1.37	0.90	30.5	7	22	2	7	.....	M. S. Henkel.
Piedmont	Mineral	919	5	19.6	.....	40	15	−11	21	33	4.82	.....	1.21	58.2	12	10	8	13	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	20	19.2[1]	−12.2	41[1]	31	−15[1]	21	51[1]	3.30	+0.55	1.00	33.0	7	6[b]	11[b]	6[b]	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	19	20.0	−14.3	40	15†	−13	3	42	4.40	+1.83	1.50	.....	6	6[b]	3[b]	20[b]	w.	J. M. Mallow.
Wardensville	Hardy	1,200	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Luther F. Sutton.
Averages and extremes		.....	.....	19.1	−12.7	43	24†	−24	15	64	3.75	+0.54	1.58	33.8	9	11	7	13	w.	
Northern Division.																				
Bens Run	Pleasants	622	16	20.2	−12.6	45	6†	−15	21	43	3.84	−0.73	0.80	29.0	16	16	3	12	.....	J. D. Riggs.
Brandonville	Preston	1,809	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. T. Miller.
Buckhannon	Upshur	1,411	21	22.3	−10.2	51	6	−15	4	45	6.20	+1.66	1.20	19.0	16	8	2	21	.....	H. A. Darnall,
Cortland	Tucker	3,300	2	.....	.....	.....	.....	.....	.....	.....	3.60	.....	1.00	22.0	7	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	16	21.7	−12.5	47	6	−18	3	42	3.01	−0.77	0.66	15.7	17	4	2	25	w.	J. M. Reed.
Davis	Tucker	3,093	9	.....	.....	.....	.....	.....	.....	.....	5.55	.....	1.10	36.5	18	8	2	21	sw.	Ross C. Male.
Elizabeth	Wirt	646	6	.....	.....	.....	.....	.....	.....	.....	4.32	.....	1.01	.....	16	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	17	20.7	− 8.4	50	26	−15	21	46	5.11	+1.77	1.16	19.6	25	2	3	26	w.	U. S. Weather Bureau.
Fairmont	Marion	883	12	20.0	−14.2	49	6†	−12	4	51	3.69	−0.29	0.82	16.5	18	7	4	20	w.	F. P. Hall.
Glenville	Gilmer	738	24	23.2	−10.3	55	12	−20	3†	52	3.80	−0.53	1.16	8.5	13	7	17	7	w.	Howard R. Brannon.
Grafton	Taylor	1,000	25	22.4[b]	−10.5	51[b]	12	−14[b]	4	52[b]	4.91	+0.84	1.20	14.0	.....	7	6	18	e.	W. C. Byers.
Lost Creek	Harrison	1,026	20	21.3	−12.0	49	6†	−21	4	46	4.24	+0.16	1.08	12.5	12	7	2	22	w.	Allen Smith.
Mannington	Marion	974	15	19.6	−12.5	49	12	−20	3	46	3.29	−1.50	0.82	12.6	21	6	3	22	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	25	20.4[a]	−12.1	44	6	− 9[a]	4	40[a]	2.41	−1.50	0.43	10.2	14	6	1	24	sw.	R. W. Muldoon.
Moundsville	Marshall	642	15	18.8[a]	−14.3	44[a]	6†	−17	21	41[a]	2.86	−0.39	0.80	22.2	11	4	1	26	sw.	M. Z. White.
New Cumberland	Hancock	987	20	16.0	−12.8	38	28	−18	20†	40	2.80	−0.02	0.60	22.2	15	7	15	9	w.	M. F. Smith.
New Martinsville	Wetzel	634	24	19.2	−14.0	46	6	−18	21	43	3.78	−0.02	0.80	.....	15	6	1	24	n.	Wm. Ankrom,
Parkersburg	Wood	638	31	20.3	−11.0	49	6	−10	21	45	2.24	−0.95	0.46	17.2	20	6	5	20	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	18	21.3	−10.7	50	6	−14	3	43	4.40	−0.10	1.30	19.0	11	5	4	22	.....	J. W. Swisher.
Philippi	Barbour	1,149	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	11	10	w.		Okey J. Robinson.
Pickens	Randolph	2,697	15	22.2[a]	− 9.6	48[a]	5	− 8[a]	3†	41[a]	9.22	+2.62	1.10	46.0	22	3	6	22	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	31	.....	.....	.....	.....	.....	.....	.....	5.84	+1.21	1.20	.....	18	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	9	.....	.....	.....	.....	.....	.....	.....	3.64	−1.16	0.88	.....	14	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	12	17.8	−14.5	47	6†	−16	3†	46	5.04	−0.49	0.98	25.5	22	13	3	15	se.	G. M. Whisler.
Terra Alta	Preston	2,612	17	15.2	−13.2	37	28	−13	21	35	2.60	−3.01	0.30	26.0	13	11	7	13	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Waugh.
Weston	Lewis	1,026	22	23.2	−10.8	53	6	−14	4	33	3.35	−0.83	0.70	16.0	12	3	13	15	.....	Weston State Hospital.
Wheeling	Ohio	645	31	17.2	.....	40	6†	−14	21†	41	3.52	+0.35	0.95	25.4	18	7	8	16	nw.	Miss M. B. Forsyth.
Averages and extremes		.....	.....	20.2	−11.9	55	12	−21	4	52	4.13	−0.18	1.30	20.7	16	7	5	19	w.	
Southern Division.																				
Bancroft	Putnam	574	13	21.8	−13.7	42	24†	−11	3	37	4.83	+0.57	0.98	14.2	14	20	5	6	ne.	R. E. Dent.
Beckley ††	Raleigh	2,440	17	24.6	− 9.2	53	27	−13	4	43	.....	.....	.....	.....	.....	13	8	10	sw.	John A. Ewart.
Bluefield	Mercer	2,558	22	24.4	−10.4	46	26	− 4	13†	39	4.06	+1.01	0.50	20.8	16	12	8	11	.....	Norfolk & Western Ry
Camden-on-Gauley	Webster	2,062	2	.....	.....	.....	.....	.....	.....	.....	5.10	.....	1.33	22.2	13	2	5	24	n.	Miss Katie Jarvis.
Charleston	Kanawha	597	14	26.4	−13.1	43	1†	− 9	4	46	4.44	+0.65	1.58	15.8	14	9	0	22	w.	C. V. Lewis.
Clay	Clay	706	1	.....	.....	.....	.....	.....	.....	.....	2.81	.....	0.62	.....	9	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba ††	Jackson	650	15	21.0	−13.0	50	6	−23	3	48	2.14	−1.63	0.99	11.0	7	5	11	15	nw.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	1	.....	.....	.....	.....	.....	.....	.....	3.98	.....	0.83	11.0	16	.....	.....	.....	ne.	Lockmaster.
Dam 20 O. R.	Wood	551	1	.....	.....	.....	.....	.....	.....	.....	2.71	.....	0.76	.....	12	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	1	.....	.....	.....	.....	.....	.....	.....	3.59	.....	1.00	.....	7	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	24	25.3	−12.0	47	26	− 3	4	36	5.86	+2.69	1.24	13.2	15	3	11	17	w.	J. J. Lincoln.
Evans	Jackson	606	5	23.0	.....	48	6	−13	4	36	3.17	.....	0.85	13.0	10	7	0	24	.....	B. F. Sayre.
Gary	McDowell	1,426	1	.....	.....	.....	.....	.....	.....	.....	6.56	.....	1.88	.....	14	.....	.....	.....	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	21	25.1[b]	− 8.2	15[b]	25	−11[b]	1	11[b]	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Hinton	..do	1,450	20	21.0	−14.0	45	25	− 6	4	38	5.75	+2.70	1.65	17.0	12	5	0	26	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	25	19.4	.....	50	27	−12	21	50	5.13	.....	2.00	16.0	19	5	0	26	.....	R. C. Ferguson.
Huntington	Cabell	538	23	20.5	−13.1	45	6†	− 2	4†	37	4.25	+0.50	1.20	17.3	16	7	1	23	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	1	.....	.....	.....	.....	.....	.....	.....	4.89	.....	2.07	10.0	20	.....	.....	.....	.....	Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	17	19.6	−13.2	42	25†	−18	21	38	4.89	+1.63	1.94	25.5	7	4	7	20	nw.	Geo. T. Argabate.
Logan	Logan	687	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	18	16.0	−13.2	42	27	−27	21	45	6.44	+2.63	1.56	31.0	13	2	10	19	nw.	S. L. Brown.
Nuttallburg	Fayette	2,252	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	24	20.2	−13.8	49	6	−14	3†	43	3.97	+0.12	1.00	16.0	9	6	4	21	nw.	W. D. Holmes.
Powellton	Fayette	933	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. C. Lampert.
Rainelle	Kanawha	2,425	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. N. Bobbitt.
Raleigh	Raleigh	2,130	1	.....	.....	.....	.....	.....	.....	.....	5.54	.....	1.40	.....	14	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	1	.....	.....	.....	.....	.....	.....	.....	5.70	.....	1.30	29.4	9	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	17	19.6	−14.9	51	6	−16	4	51	3.83	−0.11	1.00	9.0	12	2[a]	9[a]	10[a]	.....	E. C. Brace, Jr.
Ryan	Roane	706	14	22.2	−12.0	49	6	−24	3	48	3.92	−0.26	0.98	16.5	24	3	6	22	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	1	.....	.....	.....	.....	.....	.....	.....	2.99	.....	1.32	.....	4	.....	.....	.....	.....	J. N. Johnson.
Spencer ††	Roane	784	13	22.4[a]	−12.4	47[a]	28	−24	3†	54[a]	.....	.....	.....	.....	.....	2	9	20	.....	A. M. McKown.
Sutton	Braxton	839	11	22.8	−11.9	49	6†	−14	4	42	4.79	−0.17	0.95	16.2	11	9	10	12	.....	C. B. Eakle.
Union	Monroe	2,250	13	20.4[a]	−13.1	48[a]	26	−16	4	41[a]	3.90	+0.31	.....	9.5	7	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	7	21.6	.....	45	25†	−19	21	47	3.60	.....	0.85	27.0	9	19	4	8	.....	J. M. Ayres.
Williamson	Mingo	660	17	24.6	−12.1	51	28	0	4	44	5.75	+1.67	2.22	17.8	20	7	4	20	w.	J. F. Keyser.
Wilsondale	Wayne	762	9	23.2[x]	.....	55[x]	6	−12[x]	3†	44	3.35	.....	0.70	22.5	15	6[a]	3[a]	21[a]	ne.	Emory R. Noel.
Averages and extremes		.....	.....	22.0	−12.6	55	6	−27	21	51	4.50	+1.00	2.22	17.8	13	7	5	19	w-nw	
State averages and extremes		.....	.....	20.7	−12.3	55	6†	−27	21	64	4.24	+0.32	2.22	21.5	14	8	5	18	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

x Approximated by the observer.

Daily Precipitation for January, 1918.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac		.03					.03	.02				.29	.02	.04	.01	.39	.02	.04	T.			.04	.04		.09	.05	.60	.12	.09	.04	.04	2.00
Brandywine	do			.20			T	.05					.85			.65					T.		.20			.01		.28	1.30		.40		3.94
Burlington	do		.30					.05				*	.20		T.	.70							.30				*	.40	.60		.40		2.95
Harpers Ferry ‖	do		.21										1.50										.74	T.				.75			.20		3.40
Martinsburg	do		.35					T.				*	1.58			.45							.60					.32	1.26		.40		4.96
Moorefield	do		.75					T.					.20			.50							40					.90	.70		.50		3.95
Piedmont	do		.17					.09	T.	T.		1.03			.03	1.04						.12	.02			.04	.06	.73	1.21		.28		4.82
Romney	do		.30										.20			.80							.30					.40	1.00			.30	3.30
Upper Tract	do		.30				T.	T.					.90			.50										.80			1.50		.40		4.40
Wardensville	do																																
Northern Division.																																	
Bens Run	Ohio		.87				.08	.08	.03			.28	.07		.24	.69	.28	.10					.15		.05	.08	.50		.80		.04		3.84
Brandonville	Monongahela																																
Buckhannon	do		.30				T.	.30	.10		T.	.15	.50		.10	1.00		.30	.30				.20	.10	T.	.30	.40	.50	1.20	.45	T.		6.20
Central Station	Middle Is. Creek																																
Cortland	Monongahela		.50											1.00									.20		.30		.40	.60	.60				3.60
Creston	Little Kanawha	T.	.40	.04			.03	.05	.02	T.	T.	T.	.05	T	.08	.58	.10	.15	.02	T.			.07	.02		.18	T.	.47	.60	T.	T.	.15	3.01
Davis	Monongahela	T.	.30					T.	.25	.15	.05	T.	.90		.10	.20	.30	.15	.10	.05			.20	.80		.20	1.10	.20	.30	T.		.20	5.55
Elizabeth	Little Kanawha		.40	.02			.11	.16	1.01				.19		.07	.78		.06	.01			.12				.08		.37	.64	.15		.15	4.32
Elkins ***	Monongahela	.03	.10			.01	.04	.06	.08	.02	T.	.35	.32	T.	.37	.92	T.	.06	.04	.01	.01	.04	.15	.05	.03	.12	.74	.32	.86	.02	.36		5.11
Fairmont	do		.11	.02			T.	.26	.02	T.	T.	T.	.50	T.	.03	.82	.10	.04	.02	T.	T		.08	.02		.12	.03	.46	.74	.12		.20	3.69
Glenville ‖	Little Kanawha	T.	.34				.06	.12	T.				.30		T.	.72		.03	.04	T.			.32	T.	T	.04		.51	.94	.22		.16	3.80
Grafton	Monongahela		.38				*	*	*	*	*		.89			.82		T.	T.	T.			.38		T.	.30	.42		1.20		.52		4.91
Lost Creek	do	T.	.25				.14	T.	T.			T.	.80	T.	.12	.80		T.	.08	T.			.26		T.	.15	.21	.25	1.08		.10		4.24
Mannington	do	T.	.09	T.			.07	.15	.04		.01		.40	.01	.09	.41		.08	.03	.02			.16	.01	.02	.15	.18	.44	.82	.01	.10	T.	3.29
Morgantown	do	T.	.05				.04	.11	.04	T.	T.		T.		.06	.35		.39	.04	T.			.17		T.	.06	.14	.43	.43	.10			2.41
Monnsville	Ohio		.20	T.			T.	.17	.07		T.		.32		.05	.80	T.	.10	T.	T.			.25	T.		.20		.20	.50				2.86
New Cumberland	do	.30					.26	.05	.10	T.	.10		.40	T.	.07	.60		T.	.08	T.			.22	T.	.15	.16	.10	.10	.15			T.	2.80
New Martinsville	do	T.	.30		.18		.20	T.	T.			.20	.20		.20	.80		.10					.20		.05	.10	.35	.15	.70		.05		3.78
Parkersburg ***	Ohio	.08	.17			.01	.09	.12	T.		T.	.19	.03	.01	.35	.23	.03	.01	.01				.17		.03	.10	.15	.06	.39		.61		2.24
Parsons	Monongahela	T.						.40	T.		T.		1.00		.20	.40		.10	.10				.40			.10	1.30		T.		.30	.10	1.40
Philippi	do																																
Pickens	do	.10	.40					.30	.30	.20	.20	.29	.34	.10	.75	.85		.30	.40	.10			.50	.20	.20	.40	1.09	1.00	1.10		.10		9.22
Rowlesburg	do	T.	.05	T.				.25	.14	.05			.90	T.	T.	.85	.38	.06	.06	.08			.09	.08		.09	.08	1.20	1.00	.24		.20	5.84
Saint Marys	Ohio		.25	.07			.04	.12	.05				.26		.26	.88	T.	.08	.02				.16			.10		.50	.87	T.		T	3.64
Smithfield	Fishing Creek	.20	.30				.10	.20		.10			.40	.05	.10	.86	.20	.15	.10	.05			.20	.10	.10	.25	.45	.20	.90	.08		.10	5.04
Terra Alta	Monongahela		.20					.20	.10				.10		.20			.30	.30	.20			.30	.10		.20	.20			T.	T.		2.60
Wellsburg	Ohio																																
Weston	Monongahela		.30					.10	.10						.30	.70		.10	.10				.25			.20	.40	.45			.15		3.35
Wheeling	Ohio	T.	.17	.05			.01	.20	.09	T.	T.	.01	.35		.03	.95	.03	.05	.04	T.			.25	.01		.19	T.	.41	.65	.03		T.	3.52
Southern Division.																																	
Bancroft ‖	Great Kanawha		.40	.20				.90	.10	T.	T.	T.	.05		.02	.75		.20	.05				.35					.35	.98	.15		.33	4.83
Beckley	do																																
Bluefield	do		.20					.05		.10		.30	.50		.40	.20				.20		.30		.30		.25	.50	.40	.14	.02		.20	4.06
Camden-on-Gauley	do	.28		.05			.28	.03		T.	.03	.80	T.	T.	T.	T.	T.	T.	T.	.28	T.	.10	.32	T.	T.	T.	.22	1.33	.80		.28	T.	5.10
Charleston ‖	do		.50	T.			T.	.30	T.	.04			.06		T.	.85	T.	.15	.20		.12		.24	T.				.38	1.58	.10	.08	.04	4.44
Clay	do		T.				.18									.62		.20	.30		T.	.20	.13	T.			.34		.46			.38	2.81
Cuba	Sand Creek	T.	.50				T.	T.	T.	T.		.05			.35	.10		.05				.10		T.	T.	T.	T.		.99		T.		2.14
Dam 19 O. R. ‖	Ohio	.01	.24	.05			.22	.23	.03	T	T.	T.	.34		.06	.69	T.	.03	.02				.19	T.		.03		.41	.83	.03			3.98
Dam 20 O. R. ‖	do		.50	.05			.18	.17			T.	T.	.27		.05	.70	T.	.02	T.				.12	T.		.04		.35	.44	T.			2.71
Dam 22 O. R. ‖	do																																
Dam 26 O. R. ‖	do		1.00				.10						.25		T.	.70												.52	.42		.60		3.59
Elkhorn	Big Sandy				.25			.10		.05		.21	.35		.30	.22		.05	.15	.10	.20							.82	.86	1.24		.96		5.86
Evans	Ohio		.47							T.	T.	.36	.35		.30	.63		.05					.11		T.			.20	.85		.10	T.	3.42
Gary	Big Sandy	.55					.12	.03				.90		.20	.43			.03	.05	.40		.33					.35	1.88	.80	.69				6.56
Green Sulpr. Spgs. ‖	Great Kanawha												.80						.40	T.			.90	.20	.10		1.20	.30		.80			4.70
Hinton ‖	do	T.	.40	T.	T.				T.	T.	T.		1.04		T	.58		.04	T.	.02	.12		.40	T.				.24	1.65	.44	.40	.42	5.75
Holcomb	do		.24				*	*	*	*	.38	*	.78		*	.73		.15	.13				*	.04		.05	*	*	2.28	T.	.35		5.13
Huntington ‖	Ohio	.04	.36	.04			.16	.08	.04	.04	T.	T.	.38		.03	.90	T.	.04	T.	T.	T.		.22	T.				.50	1.20	.02		.20	4.25
Kayford	Great Kanawha	.04	.32	T.				.26	*	.09	*	T.	.45		*	.61	T.	.09	.07	.08	.07		.20	.05	.03	T.	T.	T.	2.07	.08	.13	.24	4.88
Lewisburg	do		.20				T.	T.				.10			T.	.40			T.				.60			T.	T.	.92	1.94		.63		4.89
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do	T.	.60				.23	.16		T.	T.	.30	.80		.10	.91		T.	.10	T	T.		.40	T.	T.	T.	.27	.41	1.56		.60		6.44
Nuttallburg	do																																
Point Pleasant ‖	Ohio		.80	T.				T.	T.				.69		.12	.88		.06					.17	T.				.33	.90	.02			3.97
Powellton																																	
Racine ‖	Great Kanawha																																
Raleigh ‖	do		.20				T.	.20					.88		.70			.05		.05	.05		.05	.20	.10		1.05	1.40	.06	.55			5.54
Reamer	do		.60				T.						.50					1.00					.10			.40	T.	.40	1.30	.60	.80		5.70
Robertsburg ‖	do		.50	.10			.39	.20					.25		T.	.75		.10					.10	T.		.10		.27	1.00	T.		.07	3.83
Ryan	do	.05	.38				.11	.20	.02	.05		.10	.06			.35	.34	.06	.10	.05	.02	.01	.23		.01	.03	.29	.23	.98	.01	.27	.01	3.92
Sissonville ‖	do							.11								.90	T.					.66						1.32	T	T.		2.99
Spencer	Little Kanawha																																
Sutton	Great Kanawha						T.	.12				.10			.01	.95		.10	.20	.10	.10		.52			.43	.01	.95	.78		.42		4.79
Union ‖	do							.60					.75		T.	.25	T.	T	T.	T.			.30					*	*	2.00			3.90
White Sulphur Spgs.	do		.10				T.	T				.10	T.		.10	.30					.15		.60					.60	.50		.85		3.60
Williamson ‖	Big Sandy	.20	.40	.05				.11	.05	.05	.05		.20		.05	.60	.15	.02	T.	.05	.15		.30					.30	2.22	.15	.22	.45	5.75
Wilsondale	do		.60	.70			.10	.05		.10		.30			.30			.05			.10	.05	.15				.30		*	*	.50		3.35

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for January, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	12	10	8	15	32	33	34	19	16	19	28	30	7	28	40	40	28	20	14	20	21	19	13	28	30	38	29	28	35	29	29	24.3
	Minimum	2	0	−12	5	10	11	19	5	7	3	2	2	−10	−1	13	16	16	12	−1	−10	1	9	4	4	23	19	18	16	19	11	13	7.0
Brandywine	Maximum	22	19	20	29	37	35	31	32	30	29	32	36	23	35	40	35	35	33	26	27	29	32	25	43	41	40	37	35	41	36	43	32.5
	Minimum	−7	10	−13	18	6	18	26	17	6	4	6	14	4	11	22	−4	14	5	−2	3	−20	10	14	−1	30	17	21	16	22	15	12	8.3
Burlington	Maximum	28	17	22	23	25	30	34	27	27	29	30	30	18	30	35	32	34	31	22	19	22	30	24	34	43	40	32	24	36	25	37	28.7
	Minimum	2	7	−14	−13	10	9	25	18	16	21	20	5	2	10	22	−2	15	14	2	−3	21	10	2	−5	32	27	17	16	19	10	17	9.4
Martinsburg§	Maximum	15	14	15	20	22	26	33	27	27	31	37	30	20	30	35	31	36	29	20	21	21	28	22	36	42	36	22	28	36	24	28	27.2
	Minimum	1	0	3	0	1	9	10	20	19	20	20	20	5	6	13	16	14	17	3	3	−4	−8	16	12	14	31	16	14	12	13	21	11.0
Moorfield	Maximum	25	21	24	25	32	30	34	32	37	35	37	34	25	33	40	35	40	34	30	28	28	35	30	38	43	43	38	25	43	37	43	33.4
	Minimum	1	10	−22	−21	13	7	25	21	9	21	9	16	3	10	−24	1	21	11	−11	−2	−22	4	18	−6	30	17	18	17	15	11	20	7.1
Piedmont	Maximum	18	15	16	24	25	28	36	27	23	25	28	34	15	29	40	32	33	31	20	21	22	28	22	31	39	38	29	20	37	28	36	27.4
	Minimum	1	7	−9	−2	17	13	25	17	16	19	20	8	1	13	18	5	23	19	6	−1	−11	12	8	1	30	29	16	15	19	14	20	11.9
Romney	Maximum	20	20	23	26	27	30			35	30	29	35	21	33	37	38	39	35	30	24	36	31	26								41	30.4
	Minimum	2	7	−11	−11	16	10			17	20	16	9	0	10	22	2	20	10	4	3	15	11	16								19	7.9
Upper Tract	Maximum	20	16	15	25	28	30	28	25	30	30	27	30	20	30	40	35	35	32	28	25	30	30	25	24	30	40	40	35	30	30	40	29.2
	Minimum	5	9	−13	10	5	15	15	18	15	19	12	12	1	11	22	6	24	10	5	7	−12	10	12	15	10	5	25	19	15	15	15	10.9
Wardensville §	Maximum																																
	Minimum																																
Northern Division.																																	
Bens Run	Maximum	17	23	22	19	34	45	45	24	25	24	38	42	17	27	34	33	30	24	14	22	25	23	20	35	40	38	29	41	37	30	32	29.3
	Minimum	7	15	5	−5	11	27	24	17	15	9	20	−1	−2	14	20	−3	23	8	1	−11	−15	6	8	5	30	26	18	24	18	17	27	11.2
Buckhannon	Maximum	16	24	15	17	35	51	44	29	24	23	41	50	15	32	45	31	32	23	15	18	20	25	19	27	37	37	45	50	44	37	35	31.2
	Minimum	10	12	−11	−15	10	34	24	15	7	18	19	5	−1	12	20	4	23	15	5	8	−10	19	13	7	29	20	25	24	25	22	28	13.4
Creston	Maximum	19	26	24	21	32	47	46	26	28	25	37	36	17	29	39	31	31	30	27	19	26	24	23	38	42	41	33	44	39	36	33	31.3
	Minimum	1	16	−18	−16	0	30	25	19	15	19	22	1	−1	14	21	1	24	17	−5	−5	−11	18	13	12	30	23	20	25	21	21	23	12.1
Elkins	Maximum	12	20	11	20	34	48	43	19	22	18	46	43	15	36	42	34	30	24	13	17	26	23	16	37	37	50	41	46	37	33	35	29.9
	Minimum	8	7	−5	−6	10	30	19	14	16	15	14	−3	−4	13	15	3	21	9	5	−2	−15	16	4	3	27	23	22	33	20	19	26	11.5
Fairmont§	Maximum	17	19	18	19	41	49	36	22	25	24	49	10	18	39	39	33	31	25	14	23	28	28	24	38	38	32	31	45	29	33	30	29.4
	Minimum	2	10	−7	−12	10	18	31	19	11	17	18	8	−1	2	18	8	11	19	2	−1	−6	−5	12	7	24	29	20	20	24	19	22	10.6
Glenville	Maximum	19	39	24	22	32	51	51	27	29	26	38	55	19	32	45	39	32	28	20	25	35	26	25	40	43	42	35	50	44	34	34	34.2
	Minimum	8	14	−20	−20	−2	28	26	18	9	19	20	3	−1	13	22	1	23	18	6	0	−8	19	13	8	30	21	22	25	23	20	27	12.3
Grafton	Maximum	17	18	15	19	38	49	47	28	24	24	45	51		35		42	30	28	24	18	25	25	22	38	39	40	35	49	40	34	35	32.2
	Minimum	7	12	−12	−14	15	27	23	12	8	18	18		−1	12		5	26	15	0	−1	−8	7	10	3	29	34	25	24	22	20	27	12.5
Lost Creek	Maximum	17	22	20	18	38	49	48	26	27	23	41	49	17	29	44	35	31	26	15	25	31	24	21	38	38	39	31	47	39	34	34	31.5
	Minimum	2	12	−14	−21	5	30	25	17	7	18	20	3	2	12	20	0	22	15	0	−5	−12	16	10	3	29	22	22	23	22	16	27	11.1
Mannington	Maximum	16	17	16	17	36	48	39	27	22	24	40	49	17	26	38	30	30	25	16	19	25	26	21	35	38	38	30	41	39	32	33	29.4
	Minimum	−5	13	−20	−19	11	13	27	18	8	18	19	3	−1	13	26	0	23	16	−1	−13	−16	12	12	0	29	24	19	22	20	15	26	9.9
Morgantown	Maximum	14	14	13	16	36	44	42	25	22	22	36	43	14	26	40	30	29	24	18	16	26	24	20	36	37	37	31	43	42	30	32	28.5
	Minimum		11	−6	−9	14	24	25	16	13	16	18	3	−3	12	18	10	21	17	5	−1	−4	16	11	12	27	23		20	19	16	24	12.3
New Cumberland	Maximum	17	18	16	14	29	37	36	24	20	24	35	34	13	23	25	25	26	20	10	20	22	23	22	32	37	36	23	38	36	29	28	25.6
	Minimum	−9	8	−14	−15	12	14	24	15	9	16	12	−3	−6	9	16	2	17	9	−5	−18	−18	8	11	8	24	13	11	15	15	8	11	6.4
New Martinsville	Maximum	16	22	20	20	32	46	44	28	22	25	35	40	14	27	31	33	28	25	16	22	25	25	20	35	40	38	28	40	38	32	32	29.0
	Minimum	−2	9	−8	−11	5	20	25	16	10	18	20	0	−3	10	21	1	15	6	3	−5	−18	14	6	2	18	20	18	22	18	15	24	9.3
Parkersburg	Maximum	17	22	16	18	33	49	40	23	25	25	45	42	17	32	34	30	29	22	16	17	23	23	21	37	43	36	23	40	34	28	29	28.7
	Minimum	3	8	−1	−8	5	32	23	18	20	20	22	−3	−1	16	15	3	22	3	3	−5	−10	16	8	14	30	23	17	23	18	19	17	11.9
Parsons	Maximum	14	17	19	22	38	50	48	22	25	21	49	35	15	30	44	36	32	26	14	19	30	23	18	38	36	42	36	41	39	34	33	30.5
	Minimum	8	8	−14	−1	11	27	22	15	15	16	19	2	−3	11	18	2	22	13	5	3	−13	17	−2	−3	28	23	29	26	22	22	28	12.1
Pickens	Maximum	13	18	20	35	48	41	35	29	25	18	37	36	35	37	40	32	30	22	25		36	25	15	34	32	45	45	47	41	35	35	32.2
	Minimum	5	9	−8	10	31	36	16	10	9	12	3	28	−5	3	10	1	22	10	5		−8	15	5	6	20	18	19	34	21	20	25	12.2
Terra Alta	Maximum	9	7	9	14	32	34	33	18	17	15	29	29	8	28	32	27	24	20	10	14	22	15	15	31	30	34	28	37	34	23	30	22.9
	Minimum	−3	−2	8	−7	12	20	17	9	9	10	13	−5	−10	5	10	6	17	9	0	2	13	11	5	4	23	25	20	12	17	10	21	7.6
Wellsburg	Maximum																																
	Minimum																																
Weston	Maximum	17	24	20	18	34	53	49	26	29	24	39	38	16	31	44	34	31	27	17	23	30	24	22	38	40	40	33	51	43	39	34	31.9
	Minimum	15	12	8	−14	6	32	26	17	11	19	21	5	10	15	21	6	23	6	8	3	4	19	11	10	30	23	24	24	23	23	29	14.6
Wheeling §	Maximum	18	16	20	20	33	40	35	26	25	26	40	3	18	30	27	33	28	20	17	22	25	26	26	36	49	26	31	40	25	31	30	26.9
	Minimum	−7	3	7	−10	−8	20	28	19	13	15	15	3	−1	0	15	1	1	14	−1	−13	14	14	10	9	25	25	12	16	17	15	16	7.4
Southern Division.																																	
Beckley	Maximum	23	24	18	30	48	48	46	41	42	48	38	20	17	31	52	30	42	40	18	9	32	48	51	51	40	49	53	41	38	38	32	37.4
	Minimum	7	15	6	−13	5	25	21	17	7	11	20	7	−3	12	14	17	20	14	0	−11	9	14	22	21	34	17	19	12	11	13	14	11.8
Bluefield	Maximum	16	16	29	30	45	42	40	23	23	30	36	34	12	40	40	37	37	25	18	25	35	30	37	40	45	46	45	43	36	36	45	33.1
	Minimum	8	14	6	−2	19	32	22	14	7	9	12	1	−4	7	21	9	21	16	5	12	−4	18	14	19	28	27	42	29	28	28	30	15.7
Charleston	Maximum	43	40	38	37	38	38	40	43	42	41	40	39	34	36	39	39	40	39	37	35	37	36	38	39	39	40	41	40	39	37	34	38.6
	Minimum	10	8	−2	9	6	31	20	11	20	18	10	11	−7	9	10	2	19	20	10	8	−4	20	10	19	30	27	28	23	28	25	30	14.2
Elkhorn	Maximum	20	23	19	28	40	45	42	27	26	29	36	41	14	39	40	37	35	37	19	21	29	29	24	34	44	47	46	41	40	37	35	33 0
	Minimum	11	18	9	3	14	36	27	19	17	14	18	5	−1	14	22	10	25	17	5	12	20	21	16	21	30	15	37	31	27	21	18	17.6
Green Sulphur Spgs.	Maximum												36	34	20	22	40	34	35	22	27	30	26	26	40	45	42	41	37	38	36	40	33.6
	Minimum												18	7	2	11	8	29	18	0	12	−11	19	15	9	28	16	33	34	27	28	25	16.6
Hinton §	Maximum	20	22	20	25	25	40	35	27	28	28	38	15	20	38	39	32	32	28	22	24	25	28	26	40	45	38	37	38	34	38	30	30.4
	Minimum	5	12	10	−6	−4	5	18	19	10	10	10	12	0	0	15	6	8	19	5	10	−4	−4	18	13	12	20	20	32	32	32	28	11.7
Holcomb §.	Maximum	18	19	20	25	30	46	32	22	25	22	42	17	30	41	37	30	32	26	24	22	38	25	23	40	41	40	50	47	34	34	32	31.1
	Minimum	5	8	5	−9	−6	13	20	11	0	10	1	7	−4	5	18	−3	−3	12	5	5	−12	10	5	7	17	12	17	30	25	25	28	7.7
Huntington §	Maximum	24	28	16	25	37	45	30	26	29	25	43	4	22	24	26	27	27	22	19	19	26	27	33	40	45	38	33	40	33	31	33	28.9
	Minimum	0	1	−1	−2	2	12	30	20	20	6	6	−1	−2	2	21	9	9	20	9	5	−1	−1	18	18	32	26	21	21	33	22	27	12.1
Lewisburg	Maximum	16	16	18	25	26	37	37	25	24	22	31	31	17	27	27	26	27	29	15	22	29	23	23	37	42	40	42	40	35	31	35	27.9
	Minimum	4	12	3	−13	−2	20	23	15	7	11	5	5	−3	7	18	−4	22	15	−2	10	−18	13	14	9	27	16	35	29	28	24	23	11.3
Marlinton	Maximum	14	10	18	16	28	34	32	20	22	22	26	26	32	24	32	24	28	22	10	20	18	24	18	28	34	34	42	34	34	28	32	25.4
	Minimum	−4	8	8	−16	−6	18	20	12	6	12	0	4	−6	0	14	−16	14	10	−4	−2	−27	10	6	−2	28	10	32	28	24	22	24	6.7
Point Pleasant	Maximum	19	23	21	23	31	49	46	28	32	26	36	36	20	28	34	34	32	26	20	22	29	27	26	39	47	40	34	38	37	29	29	31.0
	Minimum	−4	13	−14	−11	5	27	22	16	17	14	19	6	−4	11	19	2	22	12	5	−12	−14	14	6	14	29	23	15	20	18	17	24	9.5
Powellton	Maximum																																
	Minimum																																
Robertsburg§	Maximum	20	29	28	29	35	51	35	27	30	25	45	5	20	37	26	35	32	20	19	24	29	26	34	39	45	38	33	45	32	31	29	30.7
	Minimum	−5	5	−14	16	−9	0	35	18	17	11	17	0	−2	3	20	3	5	16	2	5	9	8	12	12	32	25	18	18	22	22	26	8.6
Ryan	Maximum	19	28	24	25	35	49	45	26	28	26	48	40	20	32	32	31	30	27	19	28	33	26	27	35	46	39	35	48	38	37	35	32.6
	Minimum	−4	11	−24	−21	6	33	21	16	18	17	16	0	−1	15	22	2	25	16	5	−2	−10	18	15	15	30	22	21	26	23	22	28	11.9
Spencer	Maximum	14	18	20	30	22	36	31	37	31	39	30	37	36	24	29	30	31	24	37	28	34	40	29	34	46	38	35	47	30	34		32.1
	Minimum	−1	0	−24	−24	−6	19	22	20	24	27	30	0	17	15	20	10	18	16	−2	−13	−14	15	18	14	29	25	19	20	25	21	27	12.8
Sutton	Maximum	33	33	32	21	23	49	49	27	27	36	36	32	13	32	32	33	33	30	23	26	27	27	25	38	38	38	39	42	42	33	35	32.5
	Minimum	12	6	−10	−14	5	21	27	10	19	16	9	7	−1	10	11	7	25	20	4	9	7	20	16	14	21	18	22	28	25	27	26	13.0
Union §	Maximum	19	18	18	20	38	40	38	24	27	35	39	14	20	38	30	33	32	27	18	20	25	25	36	41	42	48	46	35	38	37		30.9
	Minimum	3	2	1	−16	−3	8	30	15	7	11	6	8	−13	8	17	4	5	10	2	12	−14	14	15	13	26	18	30	28	28	16	15	10.0
White Sulphur Spgs.	Maximum	18	19	22	23	27	35	39	28	29	28	32	36	20	33	37	35	33	30	25	28	28	30	26	40	45	41	45	38	37	35	40	31.7
	Minimum	4	12	5	−16	−3	5	27	17	11	15	6	8	−1	8	20	−4	24	11	−3	11	−15	17	16	9	29	16	30	20	34	26	25	11.4
Williamson §	Maximum	25	31	19	27	35	50	33	28	29	31	15	18	20	48	29	36	33	32	22	24	22	25	36	46	50	50	45	51	34	36	36	33.4
	Minimum	13	13	8	0	3	18	33	21	21	12	12	5	2	4	20	12	12	22	15	12	1	1	20	20	21	26	26	30	30	29	32	15.9

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
Scale of Shades
0 to 2 inches.
2 to 4 inches.
4 to 6 inches
6 to 8 inches.
Over 8 inches.

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

MAR 21 1918

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

FEBRUARY, 1918

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MARCH 21, 1918

Departure of the Mean Temperature from the Normal, February, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXVI. PARKERSBURG, W. VA., FEBRUARY, 1918. No. 2.

GENERAL SUMMARY.

February was considerably warmer and slightly drier than usual and was the first month with the temperature normal or above since January, 1917, the longest period of record for the State with the monthly temperatures below the normal. The precipitation was well distributed throughout the month but the amounts received in the eastern and most of the southern counties were much deficient. The snowfall was the lightest of record for February, except in 1909 and 1915. During the severe cold weather early in the month the ground was well covered with snow. While there was practically no snow cover after the 10th, seasonally warm weather and frequent showers made the last two decades favorable for winter grains, fruit, and farm work. Wheat and rye at the close of the month, however, were generally in poor condition, owing to lack of snow cover during periods of low temperature in December.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.13 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.88 inches on the 21st, and 29.12 inches on the 25th. Elkins, 30.84 inches on the 21st, and 29.06 inches on the 25th.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 35.4°. The departure from the normal for 37 stations having ten or more years of record was +3.7°. The month opened cold and the temperature was also below the normal on the 17-18th and 21st-23d, with the lowest readings on the 5th. Seasonally high temperature prevailed from the 7th to the 16th, on the 19th and 20th, and from the 24th to the close of the month, with the highest readings on the 28th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 84 per cent; 8 p. m., 77 per cent. The February averages for the same hours for the past 29 years are 83 and 76 per cent, respectively. Elkins, 8 a. m., 83 per cent; 8 p. m., 73 per cent. The February averages for Elkins for the same hours for the past 17 years are 84 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 61 stations reporting, was 3.12 inches. The departure from the normal for 40 stations having ten or more years of record was —0.05 inch. The precipitation was lightest over the eastern counties and heaviest over the central counties. Rain was quite general on the 6-9th, 15th, 19-20th, and 25-26th, the greatest amounts being received on the 19-20th and 25-26th. Light to moderate snow or rain also fell on the 3d-4th and 22d.

RIVERS.

The Ohio River in the district was near or slightly above the flood-line on the 22-23d.

WIND.

The average wind velocity at Parkersburg was 8.2 miles per hour, or 0.9 mile above the February average for the past 28 years. The average at Elkins was 8.2 miles per hour, or 2.7 miles above the February average for 19 years. The highest velocity at Parkersburg was 48 miles per hour from the northwest on the 25th, and at Elkins 40 miles per hour from the west on the 26th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 38 per cent of the possible amount, or 1 per cent above the February average for 21 years. The average at Elkins was 42 per cent, or 7 per cent above the February average for 18 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 25th; Buckhannon, 8th; Creston, 8th; Dam No. 26, 8th; Davis, 15th and 16th; Elkins, 8th, 9th, 10th, and 14th; Evans, 8th; Fairmont, 14th; Glenville, 9th and 25th; Grafton, 11th and 14th; Green Sulphur Springs, 8th; Lewisburg, 8th and 9th; Mannington, 25th; Marlinton, 8th, 9th, and 25th; Parkersburg, 8th; Pickens, 1st, 3d, 9th, 12th, and 20th; Robertsburg, 8th; Romney, 14th; Rowlesburg, 3d, 8th, and 25th; Smithfield, 8th; Wheeling, 2d, 14th, 16th, and 25th; Williamson, 7th, 12th, 14th, and 18th.

Hail: Camden-on-Gauley, 25th; Creston, 14th; Holcomb, 26th.

Halo, lunar: Elkins and Parkersburg, 21st.

Haze, light: Morgantown, 2d.

Sleet: Holcomb, 20th; Morgantown, 15th; Piedmont, 3d and 6th; Smithfield, 3d and 20th.

Thunderstorms (dates and number of stations reporting): 12th, 1; 14th, 5; 15th, 9; 19th, 2; 20th, 1; 24th, 1; 25th, 16; 26th, 17; 28th, 1.

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	38.1	..	....	5.39	....	....	...	..	..	..
1892	37.1	72	−12	2.30	....	....	....	..	..	..
1893	35.0	71	− 6	4.81	6.70	1.65	....	..	..	..
1894	33.4	74	− 5	3.99	7.48	2.05	....	9	7	12
1895	22.8	79	−17	1.27	2.44	0.61	....	10	9	9
1896	33.4	62	− 5	3.31	6.23	1.50	....	7	8	14
1897	36.8	70	3	5.95	8.18	3.00	....	7	7	14
1898	32.7	74	−13	1.84	3.38	0.64	....	10	8	10
1899	26.1	69	−35	4.32	6.43	2.25	19.0	7	5	16
1900	30.7	83	−11	3.94	5.62	2.31	10.1	5	10	13
1901	27.1	62	− 6	0.86	1.66	0.10	4.1	8	8	12
1902	26.7	68	−14	3.20	5.65	1.33	8.1	6	7	15
1903	35.3	74	−19	5.99	9.59	2.58	8.6	10	6	12
1904	29.3	80	−13	2.37	4.55	0.52	8 1	12	9	8
1905	25.6	56	−22	2.34	4.65	0.80	8.1	8	6	14
1906	32.4	79	−11	1.60	3.34	0.46	8.1	15	6	7
1907	31.1	68	−23	2.55	4.83	0.67	11.1	9	8	11
1908	30.9	72	−10	3.72	6.26	1.77	15.8	7	8	14
1909	40.4	80	− 5	4.16	7.68	1.44	3.4	7	8	13
1910	31.5	72	−11	3.18	6.56	0.98	13.5	9	8	11
1911	38.7	76	− 6	2.03	3.92	0.40	4.8	8	8	12
1912	27.3	70	−17	2.45	5.08	0.72	6.4	10	8	11
1913	32.6	80	− 4	2.27	6.15	0.21	4.7	13	6	9
1914	28.4	70	−22	3.64	6.96	1.63	19.7	9	7	12
1915	38.4	72	− 2	3.07	6.33	0.99	3.6	10	5	13
1916	31.4	72	−12	4.30	9.19	1.79	13.2	8	6	15
1917	31.0	80	−14	3.29	7.73	1.26	10.1	9	7	12
1918	35.4	81	−19	3.12	6.60	0.45	3.8	11	6	11
Means and extremes ..	32.1	83	−35	3.26	9.59	0.10	9.2	9	7	12

Climatological Data for February, 1918.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.						Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																			
Bayard	Grant	2,700	17	30.6	+ 3.4	65	28	−14	5	38	4.34	+0.86	1.53	5.5	15	9	2	17	w.	G. C. Dixon.
Brandywine	Pendleton	2	35.2	.....	78	28	−11	5	44	1.07	.....	0.28	2.0	7	18	0	10	s.	Elmer Keister.
Burlington	Mineral	875	24	32.4	+ 2.3	65	28	− 5	2†	43	1.95	−0.49	1.35	3.0	4	10	13	5	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	29	.....	.....	.....	.....	.....	.....	.....	0.70	−1.89	0.40	T.	3	.....	.....	.....	e.	S. W. Lightner.
Martinsburg	Berkeley	435	26	32.2	+ 2.6	64	24	− 3	5†	48	1.15	−1.32	0.49	.....	5	17	6	5	se.	G. W. Van Metre, C. E
Moorefield	Hardy	900	22	36.7	+ 5.1	72	28	− 8	2	51	0.87	−1.53	0.48	1.5	5	19	5	4	.....	M. S. Henkel.
Piedmont	Mineral	919	5	33.2	.....	62	11†	− 6	5	36	2.71	.....	0.93	3.5	7	10	14	4	se.	C. A. Suter, Jr.
Romney	Hampshire	824	20	36.3	+ 4.7	69	28	− 6	5	41	1.79	−0.49	1.05	1.0	4	10	12	6	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	19	36.2	+ 4.0	79	28	− 5	5	56	1.65	−0.10	1.50	.....	2	16	5	7	w.	J. M. Mallow.
Wardensville	Hardy	1,200	0	36.6	.....	70	28	− 5	5	47	0 45	.....	0.45	0	1	22	0	6	w.	Luther F. Sutton.
Averages and extremes				34.4	+ 3.7	79	28	−14	5	56	1.67	−0.71	1.53	2.1	5	15	6	7	w.	
Northern Division.																			
Bens Run	Pleasants	622	16	36.2	+ 4.9	72	28	2	2	43	3.80	−0.77	1.00	5.0	10	19	2	7	.....	J. D. Riggs.
Brandonville	Preston	1,809	7	.....	.....	.....	.....	.....	.....	.....	4.77	.....	1.10	7.0	13	.....	.....	.....	e.	W. H. Miller.
Buckhannon	Upshur	1,411	21	37.2	+ 6.1	72	28	− 3	5	39	5.40	+1.54	1.64	7.5	11	8	6	14	.....	H. A. Darnall,
Cortland	Tucker	3,300	2	.....	.....	.....	.....	.....	.....	.....	6.40	.....	1.30	14.0	12	.....	.....	.....	.....	Samuel Harmon
Creston	Wirt	701	16	38.2	+ 6.0	74	28	− 3	5	45	4.02	+1.13	1.32	2.5	10	9	1	18	sw.	J. M. Reed.
Davis	Tucker	3,093	9	.....	.....	.....	.....	.....	.....	.....	3.95	.....	0.90	9.5	10	9	6	13	sw.	Ross C. Male.
Elizabeth	Wirt	646	6	.....	.....	.....	.....	.....	.....	.....	2.69	.....	0.92	.....	12	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	17	34.6	+ 3.1	74	28	− 7	5	41	3 61	+0.44	1.25	6.5	14	5	8	15	w.	U. S. Weather Bureau,
Fairmont	Marion	883	12	32.9	+ 0.7	73	28	− 7	5	49	4.12	+1.10	1.25	6.0	13	12	5	11	w.	F. P. Hall.
Glenville	Gilmer	738	24	38.7	+ 6.5	77	28	− 4	5	56	3.35	−0.49	1.12	6.0	11	11	11	6	w.	Howard R. Brannon.
Grafton	Taylor	1,000	25	35.8	+ 4.5	75	28	− 6	5	43	3.73	+0.38	1.34	.....	8	9	6	13	e.	W. C. Byers.
Lost Creek	Harrison	1,026	20	36.4	+ 5.9	72	28	− 6	5	48	4.18	+1.17	0.92	5.5	11	7	7	14	w.	Allen Smith.
Mannington	Marion	974	15	34.6	+ 3.9	72	28	− 9	5	46	4.62	+2.00	1.56	4.0	14	7	5	16	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	25	35.8	+ 4.6	72	28	− 8	5	41	1.57	−0.61	0.53	4.1	8	11	1	16	s.	R. W. Muldoon.
Moundsville	Marshall	642	15	.....	.....	.....	.....	−11	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Z. White.
New Cumberland	Hancock	987	20	31.0	+ 3.8	65	14	−16	5	45	1.90	−0.55	0.59	3.9	14	7	15	6	sw.	M. F. Smith,
New Martinsville	Wetzel	634	24	34.8	+ 2.8	70	28	−10	5	43	3.80	0	0.95	T.	12	12	2	14	s.	Wm. Ankrom,
Parkersburg	Wood	638	31	36.8	+ 3.0	73	28	− 6	5	41	2.81	−0.43	1.23	1.8	12	8	7	13	nw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	18	33.6	+ 4.3	75	28	− 7	5	49	5.28	+1.81	2.00	7.0	6	9	3	16	.....	J. W. Swisher.
Philippi	Barbour	1,149	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Okey J. Robinson.
Pickens [a]	Randolph	2,697	15	35.0	+ 3.4	80	28	− 9	5	51	6.60	+1.18	1.35	13.0	13	11	4	12	w.	Dr. J. L. Cunningham,
Rowlesburg	Preston	1,375	31	.....	.....	.....	.....	.....	.....	.....	5.05	+1.67	2.04	.....	12	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	9	.....	.....	.....	.....	.....	.....	.....	3.63	+0.23	1.15	2.5	10	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	12	32.0	+ 1.3	72	28	−19	5	64	5.40	+1.79	1.55	5.5	14	17	2	9	se.	G. M. Whisler.
Terra Alta	Preston	2,612	17	31.2	+ 3.6	63	28	−14	5	57	1.35	−2.66	0.60	8.0	5	11	10	7	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Waugh.
Weston [c]	Lewis	1,026	22	37.0	+ 5.6	67	14	4	5†	43	.....	.....	.....	.....	.....	.....	.....	.....	.....	Weston State Hospital.
Wheeling	Ohio	645	31	32.0	.....	69	28	−10	5†	54	3.11	+0.54	0.95	2.2	14	10	10	8	sw.	Miss M. B. Forsyth.
Averages and extremes				34.9	+ 4.3	80	28	−19	5	64	3.96	+0.49	2.04	5.8	11	10	6	12	w.	
Southern Division.																			
Bancroft	Putnam	574	13	36.2	+ 3.0	75	14	− 1	5	49	2.41	−0.68	0.79	1.0	9	18	1	9	se.	R. E. Dent.
Beckley ††	Raleigh	2,440	17	39.8	+ 6.9	74	9	0	4	43	1.71	−1.46	0.50	.....	6	11	4	13	se.	John A. Ewart.
Bluefield ††	Mercer	2,558	22	41.0	+ 7.4	74	28	0	5	40	1.84	−1.23	0.57	0.4	10	15	4	9	.....	Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	2	.....	.....	.....	.....	.....	.....	.....	5.63	.....	1.20	4.0	10	.....	.....	.....	.....	Miss Katie Jarvis.
Charleston	Kanawha	597	14	39.2	+ 0.8	79	28	2	5	55	3.77	−0.02	1.50	2.2	7	7	1	20	w.	C. V. Lewis.
Clay	Clay	706	1	.....	.....	.....	.....	.....	.....	.....	3.13	.....	0.78	3.0	9	.....	.....	.....	.....	Prof. E. H. Knabenshue
Cuba ††	Jackson	650	15	37.9	+ 5.7	76	28	− 6	5	46	2.64	−0.38	0.60	2.0	10	7	15	6	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	1	.....	.....	.....	.....	.....	.....	.....	3.24	.....	1.20	.....	12	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	1	.....	.....	.....	.....	.....	.....	.....	3.36	.....	1.74	1.6	11	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	2	.....	.....	.....	.....	.....	.....	.....	3.44	.....	1.43	1.5	9	.....	.....	.....	.....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	1	.....	.....	.....	.....	.....	.....	.....	2.65	.....	0.82	0.5	9	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans	Jackson	606	5	38.5	.....	72	28	− 1	5	34	3.47	.....	1.03	1.0	11	9	9	19	.....	B. F. Sayre.
Gary	McDowell	1,426	1	.....	.....	.....	.....	.....	.....	.....	2.90	.....	0.63	.....	9	.....	.....	.....	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	21	35.8	+ 3.6	81	28	− 1	5	49	2.85	+0.18	0.50	9.0	8	8	1	19	w.	W. H. Gwinn.
Hinton	..do	1,450	20	35.5	+ 1.4	77	28	2	5†	52	2.00	−1.11	0.64	4.0	10	8	1	19	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	5	33.3	.....	77	28	− 5	5	54	3.00	.....	0.67	5.0	11	9	7	12	.....	R. C. Ferguson.
Huntington	Cabell	538	23	37.4	+ 5.2	74	28	2	5	47	2.16	−1.34	0.74	0.5	9	9	3	16	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	1	.....	.....	.....	.....	.....	.....	.....	2.40	.....	0.70	.....	11	.....	.....	.....	.....	CabinCreek Con.Coal Co
Lewisburg	Greenbrier	2,200	17	34.6	+ 2.8	76	28	− 5	5	45	2.13	−0.82	0.54	3.0	7	8	8	12	nw.	Geo. T. Argabate.
Logan	Logan	687	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	18	28.8	− 0.4	68	28	−10	5	40	2.98	−0.46	0.70	5.0	12	5	12	11	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	24	38.2	+ 5.0	75	14†	− 6	5	50	2.83	−0.78	0.86	T.	9	9	7	12	sw.	W. D. Holmes.
Powellton	Fayette	933	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. C. Lampert.
Rainelle	Kanawha	2,425	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. N. Bobbitt.
Raleigh	Raleigh	2,130	1	.....	.....	.....	.....	.....	.....	.....	3.29	.....	1.00	1.0	10	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	1	.....	.....	.....	.....	.....	.....	.....	1.73	.....	0.65	0.4	5	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	17	35.4	+ 2.8	76	28	− 1	5†	50	2.76	−0.43	0.85	1.0	11	10	2	16	sw.	E. C. Brace, Jr.
Ryan	Roane	700	14	37.4	+ 4.3	75	28	− 3	5	51	2.85	−0.68	0.62	5.3	12	9	6	13	.....	Wm. E. Ryan,
Sissonville	Kanawha	625	1	.....	.....	.....	.....	.....	.....	.....	2.25	.....	0.86	2.0	4	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. M. McKown.
Sutton	Braxton	839	11	37.0	+ 2.9	78	28	− 2	23	52	4.20	+0.74	1.04	9.2	10	15	5	8	.....	C. B. Eakle.
Union [b]	Monroe	2,250	13	35.0	+ 2.1	65	25	− 2	5	42	2.25	−0.49	0.75	T.	6	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	7	36.9	.....	78	28	− 3	5	43	2.57	.....	0.60	2.0	8	17	3	8	....	J. M. Ayres.
Williamson	Mingo	660	17	39.0	+ 3.1	79	28	6	5†	52	2.38	−0.93	1.00	0.5	12	11	6	11	w.	J. F. Keyser.
Wilsondale	Wayne	762	0	42.1[v]	.....	79[a]	28	3[v]	5	50[b]	.....	.....	.....	.....	.....	11	10	7	.....	Emory R. Noel.
Averages and extremes				36.5	+ 2.8	81	28	−10	5	55	2.91	−0.52	1.74	2.6	9	10	5	13	w.	
State averages and extremes				35.4	+ 3.7	81	28	−19	5	64	3.12	−0.05	2.04	3.8	9	11	6	11	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[v] Approximated by the observer.

Daily Precipitation for February, 1918.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
ayard	Potomac	T.	.02	.09	T.	.01	.15	.06	.04	.15			.04				.20	T.		.29	1.53	.01	.40			.05	1.30						4.34
randywine	do									.14						.17				.10	.16		.10			.12	.28					1.07
urlington	do								*							.30				T.			.30			1.35						1.95
arpers Ferry	do		T.													.10					.20			T.			.40					0.70
artinsburg	do									.11						.10				.49			.05		T.	.40						1.15
oorefield	do									.12						.05				.07			.15				.48					0.87
edmont	do			T.	.05		T.			.22			T.	T.		.12				.48	.61		.29		T.	T.	.93					2.71
omney	do			T.						T.						.23				.41			.10			1.05						1.79
pper Tract	do																			T.	.15						1.50					1.65
ardensville	do																										.45					0.45
Northern Division.																																
ens Run	Ohio						.11		.10	.33			.08			.37				1.00	.37		.27			.58	.59					3.80
randonville	Monongahela			.19	.10	T.	T.	.14		.18	.21			.20		.23	T.			T.	1.08	T.	.20	.40	.40	1.10	.43					4.77
ckhannon	do			.18	.05		.25		.20	.35			T.			.40				.40	1.08		.65			.20	1.64					5.40
entral Station	Middle Is. Creek																															
ortland	Monongahela		.30	.20	.20	.30		.40	.50		1.30							.40			.30	.80		.40				1.30				6.40
reston	Little Kanawha			.20	T.	T.		.26		.20	.25			T		.27			T.	.05	1.32	T.	.20	T.		T.	1.25		.02			4.02
avis	Monongahela			T.	.30	.20			.80					.15		.30		T.			.90	.05	.15	.25			.85					3.95
lizabeth	Little Kanawha		.04	.01				.05		.27	.09			.03		.30			.09	.92			.26		.09		.54					2.69
lkins ***	Monongahela	T.	T	.09	.04		.12	.11	.12	.30			T.			.21	T.	.01		.41	.45	T.	.43		.01	1.17	.14					3.61
airmont	do			.07	.04	T.		.27		.14	.27			.10		.34		T.	T.	.08	1.25	T.	.16	.15		.20	1.05	T.	T.			4.12
lenville	Little Kanawha			.12	.05	T.		.16		.10						.40				.10	1.12		.28	.10		.22	.70					3.35
rafton	Monongahela				T.		.46		*	*						.31		T.		.66	.68		.77				.85					3.73
st Creek	do			.24	T.		.18	.08	.04	.32	T.		.03			.43				.65	.92		.48			T.	.81					4.18
annington	do			.08	.04	T.	.12	.09	.03	.39			.03	.15		.40				.95	.48	T.	.30		T.	.18	1.38					4.62
organtown	do			T.	.03		.06	.05		T.	.05			T.		T.				.53	.17		.26		T.	T.	.42					1.57
oundsville	Ohio																															
ew Cumberland	do	.05		.03	.05		.03	.02		.03			.03			.29		T.		.59	.16		.15		.27	.16	.04	T.				1.90
ew Martinsville	do				.10		.10		.15	.33			.05	.05		.42				.95	.45		.40			.50	.30					3.80
arkersburg ***	Ohio		T.	.02	T.		.04		.11	.20			.03		.23	.01	T.	T.		1.16	.07		.14		.12	.68		T.				2.81
arsons	Monongahela	.10		.03			T.	T.	T.	T	1.00		T.					T.		T.	2.00		.60			T	1.55					5.28
hilippi	do																															
ickens	do			.10	.30		.13	.20		.56			T.			.95		T.		.30	1.05		.60	.40	.40	.60	1.01					6.60
owlesburg	do				.18	.08		.40	T.	.10	.24			.06		.40					2.04	T	.17	.26		.08	1.04					5.05
aint Marys	Ohio			T.				.04		.24	.14			.12		.38				.23	1.15		.23			.20	.90		T.			3.63
mithfield	Fishing Creek			.16	.20		.05	.23		.24	.14			.15		.38		T.		.20	1.31		.35	T.		.40	1.55		.04			5.40
erra Alta	Monongahela				.20					.10										.15			.60			.30						1.35
ellsburg	Ohio																															†††
eston	Monongahela			.20	.05		.20	.10	.10	.40						.40				.55	1.00		.60				.15					
heeling	Ohio	.01	T	.01	.02	T.		.18		.12	.04			.14		.28		T.		.10	.95	T.	.10	.03	T.	.18	.95					3.11
Southern Division.																																
ancroft	Great Kanawha			.10	T.					.22	.30					.15				.13	.79		.10			.18	.44					2.41
eckley	do							.16	.25	.18						.30	.50										.32					1.71
luefield	do		.05	.05				.12	.15	.10						.05					.57		.15	.10			.50					1.84
amden-on-Gauley	do			.11	.20		.33		.66	.82					.11					1.00			.20		1.00	1.20					5.63
harleston	do			T.	.24					.62	.08							T	T.	T.	1.50		.15	T.		.48	.70		T.			3.77
lay	do			.36					.26	T.	.42								.11	.34	.14		.30			.42	.78					3.13
uba	Sand Creek			.14	T.	T.		.05	.20	.20			T.			.20				.60	.20		.20			.35	.50		T.			2.64
am 19 O. R.	Ohio			.02	.01			.03		.37	T.			.08		.41		T.	T.	.20	1.20	T.	.10	.03	T.	.09	.70					3.24
am 20 O. R.	do			.05				.04		.21	.19			.03		.20				.23	1.74		.12			.04	.51					3.36
am 22 O. R.	do							.07		.29	.23			.14		.27				.07	.79		.15				1.43					3.44
am 26 O. R.	do			.05				.10		.20	.23					.17				.08	.82					.20	.80					2.65
lkhorn	Big Sandy																															
vans	Ohio			.04			.06	.07	.17	.31			T.			.36				.42	.57		.14			.30	1.03					3.47
ary	Big Sandy		.27	.28			.28		.26	.20					.41					.63					.10	.47					2.90
reen Sulpr. Spgs.	Great Kanawha		.20		.30				.40	.50			T.							.35			.40			.20	.50					2.85
inton	do			.14	T.			.10		.14	.18			T.		.10	T.				.64		.10	.18		.06	.36					2.00
olcomb	do			*	.14		.32		T.	.38					.30					.10	*	.62	.30			.17	.67					3.00
untington	Ohio			.02	.02					.14				.40		.22	T.			.10	.74	T.				.18	.34					2.16
ayford	Great Kanawha			T.	.05	*	*	.08		.13	.37				.37				T.		.70		.20			.07	.43					2.40
ewisburg	do		T.		T.		T.	.28	.08	.25			T.			.32				.36		.30				.54					2.13
ogan	Guyandotte																															
adison	Great Kanawha																															
arlinton	do																															
uttallburg	do																															
oint Pleasant	Ohio			.05						.24	.01			.03		.34				.10	.86		T.			.35	.82					2.83
owellton																																
ainelle	Great Kanawha																															
aleigh	do			.05			.60	T.	.14	.25			.08		.32					1.00		.05			.30	.50		T.			3.29
enick	do							*	*	.35						.20					.65			.03			.50					1.73
obertsburg	do			.10			.10			.17	.32				.23				.10	.10	.85		.10			.27	.42					2.76
yan	do			.07	.01		.06		.10	.39			T.			.21				.28	.62		.32		.03	.20	.56	T.				2.85
ssonville	do								T.	.78											.86	T	.20	T.			.41	T.				2.25
pencer	Little Kanawha																															
tton	Great Kanawha			.11	.10		.16		.08	.42			T.							.27	.74		.82			.46	1.04					4.20
nion	do								.35	.30		.20				.10					.50		T.				.75					2.25
hite Sulphur Spgs.	do							.25	.25	.25			T			.35				.12	.55		.20		T.		.60					2.57
illiamson	Big Sandy				.10	T.			.20	.02	.14	.28					.24	.02	T.		.02	.98			.04		.04	.30					2.38
ilsondale	do																															

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

|||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

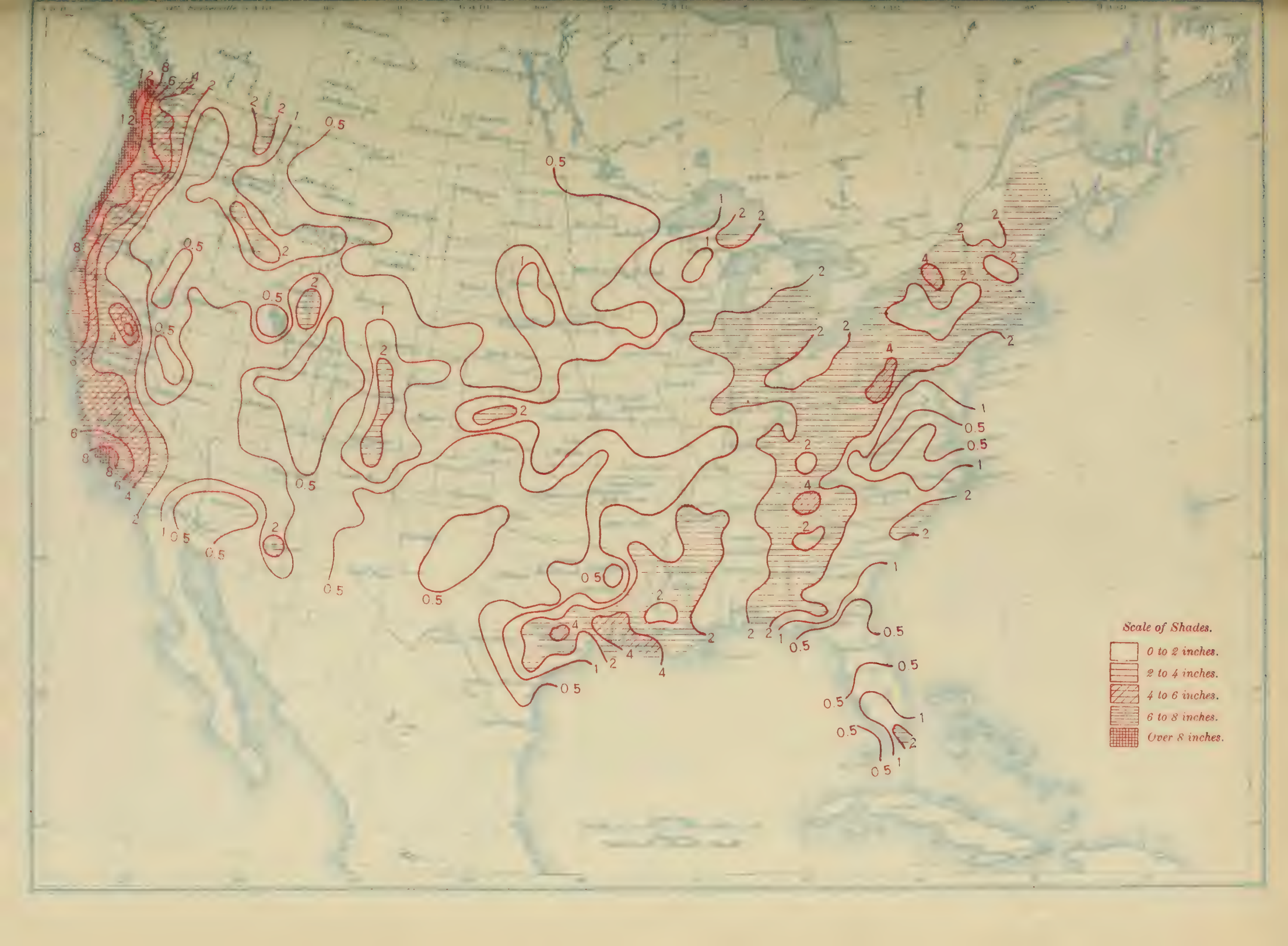
T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for February, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	21	21	36	29	8	41	38	45	30	38	53	55	52	48	45	48	38	38	55	58	20	21	38	48	53	53	51	65				41.2
	Minimum	11	10	21	−6	−14	6	33	32	32	25	30	44	31	30	25	30	12	4	24	20	2	7	12	35	31	20	24	29				20.0
Brandywine	Maximum	30	32	47	32	20	43	51	52	47	52	54	57	54	50	54	38	39	40	53	55	31	33	51	67	60	57	56	78				47.6
	Minimum	9	12	25	4	−11	14	30	21	35	26	24	29	39	22	37	26	27	10	31	29	17	16	12	26	38	30	20	34				22.8
Burlington	Maximum	26	20	41	31	19	40	48	44	50	48	57	57	55	49	53	33	37	40	58	59	26	36	50	62	58	57	55	65				45.5
	Minimum	10	−5	12	5	−3	−3	12	23	32	35	27	28	30	22	33	24	22	10	25	25	13	13	11	31	30	32	22	32				19.2
Martinsburg§	Maximum	23	25	40	14	14	45	51	40	49	51	50	57	47	51	53	36	31	37	59	53	26	33	50	64	60	42	54	62				43.5
	Minimum	9	10	14	10	−3	−3	8	31	31	25	27	29	35	26	27	24	25	16	16	34	14	14	19	23	35	34	26	28				20.9
Moorfield	Maximum	35	24	42	42	25	50	55	51	49	57	65	63	59	55	60	41	39	45	60	62	35	39	56	70	63	63	58	72				51.2
	Minimum	6	−8	8	9	−4	−1	38	17	32	26	24	29	44	24	40	25	27	12	31	34	17	16	17	48	34	22	23	31				22.2
Piedmont	Maximum	32	23	41	32	16	37	48	45	50	47	62	61	56	46	48	31	35	38	45	57	27	34	49	57	52	57	55	62				44.4
	Minimum	15	2	18	3	−6	3	35	37	32	33	26	32	35	24	30	24	21	10	27	26	10	14	15	32	34	29	23	35				22.1
Romney	Maximum	36	35	40	40	19	31	53	50	52	54	68	66	61	55	60	40	42	42	59	61	34	37	40	65	60	63	67	69				50.0
	Minimum	14	−3	15	7	−6	0	27	25	33	30	27	33	40	26	35	25	23	10	28	28	12	14	20	32	33	32	32	40				22.6
Upper Tract	Maximum	30	30	45	37	22	43	48	48	53	50	62	60	53	55	49	55	36	42	56	57	30	38	52	63	60	57	50	79				48.6
	Minimum	11	−2	15	6	−5	15	38	24	34	26	26	35	44	44	25	25	24	22	32	30	15	15	18	30	37	28	28	23				23.7
Wardensville §	Maximum	32	25	45	42	36	47	53	50	55	53	62	61	59	50	55	36	38	39	59	63	41	38	53	67	63	63	53	70				50.3
	Minimum	7	5	13	8	−5	2	34	25	33	26	24	27	41	23	35	26	25	11	33	33	30	30	21	20	33	32	21	31				23.0
Northern Division.																																	
Bens Run	Maximum	28	25	39	36	16	44	43	45	53	46	59	64	50	67	67	46	42	58	64	65	29	34	49	58	60	59	52	72				48.9
	Minimum	10	2	23	5	5	15	32	29	32	30	27	32	31	27	29	27	21	16	41	22	9	17	15	32	38	30	25	38				23.6
Buckhannon	Maximum	30	31	40	40	17	40	45	56	54	46	62	64	55	65	62	47	43	52	65	63	40	32	40	54	63	50	52	72				49.3
	Minimum	13	17	29	6	−3	17	40	24	38	31	27	32	40	26	31	27	21	14	45	27	11	17	2	40	42	28	24	34				25.0
Creston	Maximum	30	30	40	38	20	45	45	43	51	50	62	64	60	67	66	51	48	53	65	62	44	36	52	60	57	55	52	74				50.7
	Minimum	15	11	28	7	−3	18	40	28	35	32	26	31	39	26	33	29	22	16	40	30	12	18	7	45	41	32	23	38				25.7
Elkins	Maximum	26	34	41	15	22	47	45	54	54	47	63	63	52	59	60	43	30	51	62	59	21	29	48	54	60	52	54	74				47.1
	Minimum	12	5	15	−1	−7	18	37	30	32	30	34	35	28	23	26	25	15	10	39	18	7	15	7	43	42	26	22	34				22.1
Fairmont§	Maximum	20	36	40	12	41	43	44	51	52	48	61	63	46	68	45	40	28	56	61	35	26	32	48	54	59	41	55	73				45.6
	Minimum	10	4	11	8	−7	−6	38	30	34	31	28	34	37	26	27	25	21	16	17	35	9	10	6	12	35	29	23	24				20.2
Glenville	Maximum	33	33	41	39	23	48	48	48	56	53	68	68	66	71	70	51	51	59	66	67	31	38	53	59	62	66	57	77				53.6
	Minimum	15	13	28	7	−4	16	41	27	35	32	24	28	40	24	33	29	22	12	40	29	11	16	−3	25	42	30	21	34				23.8
Grafton	Maximum	29	30	39	37	16	45	45	56	56	49	53	65	56	66	64	38	40	56	62	63	26	34	48	55	61	58	53	75				49.1
	Minimum	9	9	28	9	−6	15	32	30	37	29	27	29	32	24	29	26	21	13	35	24	9	16	1	26	35	23	29	35				22.4
Lost Creek	Maximum	31	30	38	36	18	44	46	49	55	50	65	64	57	66	63	41	43	57	62	60	27	33	48	58	61	61	52	72				49.5
	Minimum	11	6	27	6	−6	15	38	26	37	31	28	30	37	21	30	26	21	9	36	27	13	13	0	36	37	48	19	34				23.4
Mannington	Maximum	27	28	39	37	12	45	44	44	54	49	62	63	56	68	65	39	42	52	59	64	27	33	45	54	57	58	52	72				48.1
	Minimum	9	−1	19	5	−9	12	38	29	34	31	26	29	37	24	30	25	20	11	29	27	9	15	−1	26	33	28	21	35				21.1
Morgantown	Maximum	25	25	38	36	12	43	43	50	55	48	60	64	54	65	64	35	38	54	59	64	28	30	43	52	58	61	54	72				47.5
	Minimum	6	11	22	2	−8	10	37	31	35	28	33	48	36	31	28	22	18	13	38	26	6	14	14	39	42	26	27	38				24.0
New Cumberland	Maximum	19	26	37	31	5	40	39	42	48	40	53	58	51	65	60	33	32	45	55	60	22	30	45	54	54	52	52	49				42.8
	Minimum	1	−7	9	−3	−16	−5	35	24	29	23	30	43	32	24	24	17	16	8	37	21	3	10	16	40	38	24	25	38				19.1
New Martinsville	Maximum	28	24	40	34	15	44	43	45	46	46	60	62	57	68	63	45	42	55	62	60	25	34	46	55	57	60	53	70				47.8
	Minimum	8	−3	14	4	−10	4	30	28	35	30	27	33	35	25	30	26	21	14	32	25	9	17	12	32	38	28	32	38				21.9
Parkersburg	Maximum	17	28	40	18	28	43	46	46	54	48	62	64	50	69	50	47	32	52	66	62	22	35	50	62	66	49	51	73				47.5
	Minimum	9	7	18	1	−6	28	33	29	32	30	31	48	34	30	29	28	20	18	47	21	10	19	18	47	47	32	28	43				26.1
Parsons	Maximum	32	32	39	22	17	45	44	53	48	47	63	63	53	62	62	43	41	56	61	60	24	29	47	53	61	35	56	75				47.2
	Minimum	16	3	22	3	−7	7	37	29	33	30	26	26	28	20	28	25	20	8	30	23	8	11	−2	23	35	27	18	29				19.9
Pickens	Maximum	25	31	37	27	29	40	42	....	50	52	65	58	55	60	58	42	32	63	59	59	32	29	51	55	59	55	62	80				48.4
	Minimum	12	10	15	1	−9	25	34	....	34	27	31	34	32	28	26	23	16	12	35	20	7	14	7	26	40	22	22	39				21.6
Terra Alta	Maximum	23	25	35	29	9	36	37	42	40	38	50	56	49	55	56	37	37	37	58	57	20	25	39	45	55	55	50	63				41.4
	Minimum	6	10	25	−3	−14	8	33	31	32	24	30	45	31	26	34	30	12	10	29	20	1	8	12	38	35	21	21	36				21.1
Wellsburg	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....				....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....				....
Weston	Maximum	30	31	40	37	17	46	47	49	57	50	62	66	59	67	64	49	46	55	62	65	29	33	47	56	63	....	....	....				49.1
	Minimum	12	12	19	12	4	12	40	28	38	32	30	34	39	26	32	28	21	15	42	29	12	19	4	39	44	....	....	....				24.9
Wheeling §	Maximum	22	34	42	10	41	44	44	50	49	46	63	66	40	68	40	40	30	48	63	35	27	35	48	55	58	42	57	69				45.2
	Minimum	5	−3	−3	4	−10	−10	38	30	30	27	28	34	36	27	27	24	20	14	14	14	7	8	17	20	38	29	27	31				18.7
Southern Division.																																	
Beckley	Maximum	33	30	28	23	49	50	70	68	74	69	61	61	58	51	62	51	54	60	56	52	57	34	30	43	48	61	57	69				52.1
	Minimum	9	11	8	0	19	20	41	32	39	37	32	30	35	30	44	32	37	42	38	33	31	17	16	27	29	27	30	26				27.6
Bluefield	Maximum	44	37	45	34	27	45	50	55	57	60	65	60	60	62	60	48	46	48	62	62	29	33	52	55	63	64	65	74				52.3
	Minimum	25	24	32	8	0	24	36	30	40	34	34	44	44	38	44	28	25	19	38	28	14	23	23	40	48	26	25	40				29.8
Charleston	Maximum	30	33	42	40	40	42	49	48	57	55	58	69	65	70	62	51	60	58	60	59	57	51	52	64	72	63	64	79				55.4
	Minimum	12	16	22	10	2	18	21	28	30	33	28	30	36	30	30	28	25	19	20	35	10	13	12	17	43	31	25	24				23.1
Elkhorn	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....				....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....				....
Green Sulphur Spgs.	Maximum	33	36	41	38	22	37	44	36	38	50	64	61	59	45	47	60	43	46	64	65	31	34	54	60	65	65	61	81				49.3
	Minimum	21	16	32	9	−1	4	4	28	33	31	25	30	29	26	28	36	21	15	37	30	16	22	7	24	25	24	21	32				22.3
Hinton §	Maximum	34	33	40	18	24	42	51	35	43	53	62	59	58	63	57	45	34	45	63	50	28	35	51	59	65	43	58	77				47.3
	Minimum	25	21	21	12	2	2	10	28	32	35	28	29	32	29	30	32	29	19	19	42	20	20	18	19	28	32	25	25				23.7
Holcomb §	Maximum	25	39	30	15	37	47	36	52	50	53	63	64	52	59	49	48	30	46	64	40	38	37	38	58	61	40	60	77				46.5
	Minimum	24	15	15	7	−5	−4	25	27	28	25	28	29	37	27	33	27	29	13	18	32	12	13	6	12	20	27	21	23				20.1
Huntington §	Maximum	20	37	40	14	45	46	48	56	56	52	61	64	51	72	45	54	32	54	65	33	29	40	53	62	69	44	55	74				49.0
	Minimum	13	13	20	9	2	3	41	29	31	34	31	40	41	31	35	30	25	21	22	33	15	15	27	29	49	33	27	27				25.9
Lewisburg	Maximum	33	31	41	37	17	39	45	41	44	48	55	51	49	48	51	38	41	43	57	57	29	33	50	54	59	62	59	76				46.0
	Minimum	20	16	28	6	−5	−2	35	20	32	31	30	28	34	24	37	26	24	13	34	27	14	20	16	26	38	28	20	31				23.2
Marlinton	Maximum	28	30	34	30	10	32	40	36	42	46	48	48	46	34	42	36	36	34	38	50	22	28	40	50	50	52	50	68				39.3
	Minimum	10	4	26	2	−10	−2	32	20	30	26	20	22	34	20	30	26	20	8	26	20	12	16	2	18	34	24	18	28				18.4
Point Pleasant	Maximum	28	30	43	37	19	44	47	44	54	52	64	65	58	75	71	53	45	55	66	66	29	42	54	62	65	65	57	75				52.3
	Minimum	8	5	26	3	−6	16	36	25	32	30	26	35	35	25	30	25	21	14	42	25	9	17	20	38	45	29	23	39				24.0
Powellton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....				....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....				....
Robertsburg§	Maximum	31	35	42	15	42	45	48	51	55	53	65	55	74	47	52	33	52	66	35	35	28	40	55	61	69	45	58	76				48.7
	Minimum	12	12	18	8	−1	−1	38	26	27	32	28	32	27	32	29	24	16	21	31	13	12	12	19	23	46	35	23	26				22.1
Ryan	Maximum	31	37	38	33	19	46	48	49	50	48	65	67	56	72	60	49	41	60	65	65	32	38	52	65	65	60	60	75				51.6
	Minimum	15	16	15	7	−3	14	38	23	37	31	23	29	37	24	33	23	24	13	40	28	11	16	1	26	44	30	20	36				23.2
Spencer	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....				....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....				....
Sutton	Maximum	33	33	40	40	22	38	41	43	52	53	58	66	66	65	65	52	49	54	62	62	31	27	50	56	64	64	58	78				50.8
	Minimum	17	15	30	9	−1	17	22	27	36	33	24	26	41	25	32	30	22	13	34	19	13	15	−2	25	41	31	22	34				23.2
Union §	Maximum	....	38	41	18	22	34	36	49	51	52	62	63	58	62	63	44	38	50	62	35	30	32	42	62	65	44	62	....				46.7
	Minimum	....	19	9	−2	6	11	20	30	32	28	29	34	28	39	27	28	16	20	31	15	18	22	31	38	27	21	30	....				23.3
White Sulphur Spgs.	Maximum	37	34	40	30	19	43	46	40	45	49	58	55	55	55	57	45	43	44	62	61	31	52	55	62	60	58	64	78				49.2
	Minimum	12	18	27	9	−3	0	35	21	31	33	23	25	33	25	40	28	24	13	32	30	14	25	28	34	32	33	28	38				24.6
Williamson §	Maximum	26	34	42	19	30	42	54	48	54	55	68	65	60	74	55	60	34	60	67	43	32	34	57	66	74	46	60	79				51.4
	Minimum	25	22	25	14	6	6	26	31	32	36	30	30	40	33	33	30	30	22	22	42	20	20	24	24	37	33	27	27				26.7

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

,0S
WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MARCH, 1918

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
APRIL 25, 1918

Departure of the Mean Temperature from the Normal, March, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXVI. PARKERSBURG, W. VA., MARCH, 1918. No. 3

GENERAL SUMMARY.

March was sunshiny, considerably warmer, and somewhat wetter than usual, with the rainfall poorly distributed over the State. The snowfall was exceptionally light, no snow being received at many stations and measurable amounts only in the northern or more elevated localities. There were but three or four days with the temperature much below the normal, and the month was considered one of the most favorable of March record. Heavy rains, however, over the central counties caused marked local floods and much damage resulted, especially to coal and lumber interests. At the close of the month plowing was progressing rapidly, pastures and meadows were green, and winter wheat and rye were in fair to good condition.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.08 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.62 inches on the 10th, and 29.51 inches on the 9th. Elkins, 30.63 inches on the 11th, and 29.48 inches on the 14th.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 46.4°. The departure from the normal for 39 stations having ten or more years of record was +4.0°. The month opened warm, but the temperature was near the normal from the 2d to to the 4th. Warm weather also prevailed on the 4-5th, 9-10th, 12-14th, 18-24th, and 30th-31st, with the highest readings generally on the 19th and 20th The temperature was somewhat below the normal on the 7-8th, 11th, 15-17th, and 25-29th, with the lowest readings in practically all sections on the 11th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 76 per cent; 8 p. m., 61 per cent. The March averages for the same hours for the past 29 years are 80 and 69 per cent, respectively. Elkins, 8 a. m., 79 per cent; 8 p. m., 62 per cent. The March averages for Elkins for the same hours for the past 18 years are 83 and 70 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 63 stations reporting, was 4.26 inches. The departure from the normal for 43 stations having ten or more years of record was +0.12 inch. Most of the rainfall was recorded on the 4-5th, 7th, 9-10th, 12-14th, 21st, and 24-25th, and the amounts on the 12-14th were heavy and excessive over the central, west-central, and east-central counties. Light snow or snow flurries occurred in the northern and mountain counties on the 7th, 10th, 12th, and 15th.

RIVERS.

Excessive rains on the 12-14th over the central, west-central, and east-central counties, ranging generally from three to more than six inches, caused great floods in the Little Kanawha, West Fork, Tygarts Valley, Cheat, Elk, Gauley, and Greenbrier rivers. The Little Kanawha River at Glenville and Creston was the highest ever known, with crest stages of 32.9 feet and 32.0 feet, respectively. The Ohio River at Point Pleasant was also somewhat above the flood-line and near or slightly above the flood-line from northern West Virginia to Point Pleasant.

WIND.

The average wind velocity at Parkersburg was 6.2 miles per hour, or 1.1 miles above the March average for the past 28 years. The average at Elkins was 6.3 miles per hour, or 0.7 mile above the March average for 19 years. The highest velocity at Parkersburg was 44 miles per hour from the northwest on the 10th, and at Elkins 54 miles per hour from the southwest on the 10th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 53 per cent of the possible amount, or 14 per cent above the March average for 20 years. The average at Elkins was 59 per cent, or 21 per cent above the March average for 19 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 2d, 5th, 21st, and 22d; Charleston, 5th, 8th, 22d, and 30th; Creston, 2d, 21st, and 22d; Elkins, 22d, 28th, 29th, and 30th; Grafton, 2d and 22d; Hinton, 5th and 22d; Lewisburg, 12th and 13th; Marlinton, 13th and 22d; Pickens, 1st; Robertsburg, 2d, 5th, and 8th; Rowlesburg, 22d; Wellsburg, 4th, 21st, and 30th; Wheeling, 4th, 18th, 19th, 30th, and 31st; Williamson, 2d, 8th, 22d, and 26th.

Hail: Bens Run, Brandonville, Marlinton, Parkersburg, Robertsburg, and Terra Alta, 14th; Holcomb, 4th, 6th, and 12th; Pickens, 6th.

Halo, lunar: Elkins, 6th.

Sleet: Bayard, 24th; Marlinton, 4th; Wheeling, 1st.

Thunderstorms (dates and number of stations reporting): 4th, 1; 5th, 4; 6th, 6; 7th, 6; 9th, 11; 10th, 2; 12th, 4; 13th, 7; 14th, 13; 23d, 1.

An aurora was observed generally throughout the State on the evening of the 7th.

COMPARATIVE DATA FOR MARCH.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	34.9	..	....	4.91	....	....	....	..	..	..
1892	36.4	87	8	3.50	....	....	....	..	..	..
1893	40.7	84	3	1.49	2.89	0.89	5.2	8	8	15
1894	45.8	88	1	1.94	3.05	0.74	1.9	15	9	7
1895	39.6	90	0	3.05	4.75	0.89	7.9	11	9	11
1896	36.1	76	−10	4.45	8.40	1.76	....	10	8	13
1897	46.1	81	12	3.60	6.52	1.33	....	9	10	12
1898	48.5	86	9	5.43	10.05	1.25	T.	8	9	14
1899	42.5	76	0	5.82	8.48	2.40	4.5	7	9	15
1900	38.5	78	− 5	3.79	6.48	2.18	14.7	7	9	15
1901	42.9	83	−11	3.23	5.27	0.90	2.3	8	8	15
1902	43.4	80	− 5	4.30	6.29	3.00	15.0	10	9	12
1903	51.3	87	13	4.47	6.59	2.70	0.2	10	9	12
1904	43.8	86	7	4.12	6.10	1.38	1.9	9	8	14
1905	46.6	88	− 2	4.10	6.46	1.45	0.7	14	7	10
1906	37.3	75	− 7	4.77	8.11	1.98	13.4	7	6	18
1907	49.6	94	2	4.77	8.18	1.05	4.2	12	8	11
1908	47.8	89	15	6.04	8.60	1.23	1.1	11	8	12
1909	40.8	83	10	3.38	8.66	1.10	4.7	9	10	12
1910	49.5	90	5	0.55	2.25	0.04	1.1	18	9	4
1911	40.5	90	− 5	3.30	7.86	1.12	5.2	11	8	12
1912	39.9	80	6	5.02	9.36	1.78	5.1	8	7	16
1913	45.7	89	− 3	4.53	7.90	1.77	2.7	11	9	11
1914	37.3	83	−13	3.03	7.11	0.89	17.7	10	8	13
1915	34.4	63	7	1.61	4.32	0.53	6.7	12	7	12
1916	38.5	88	− 4	4.88	9.88	2.49	9.0	11	7	13
1917	41.9	85	− 3	6.58	14.20	3.10	11.6	14	4	13
1918	46.5	85	9	4.6	9.37	1.55	0.1	16	5	10
Means and extremes ..	42.4	94	−13	3.96	14.20	0.04	5.7	11	8	12

Climatological Data for March, 1918.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	17	40.6	+ 3.3	68	21	9	11	42	5.57	+1.13	1.78	2.5	12	12	7	12	w.	G. C. Dixon.
Brandywine	Pendleton		2	46.4		76	14†	14	11	49	3.77		1.50	0	10	23	0	8	s.	Elmer Keister.
Burlington	Mineral	875	24	44.8	+ 3.9	77	22	15	11	47	1.55	−1.01	1.35	0	2	15	12	4	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	29								2.41	−0.73	0.58	0	8				w.	S. W. Lightner.
Martinsburg	Berkeley	435	26	45.1	+ 4.2	77	19†	19	11†	46	2.31	−0.95	0.84	0	8	18	7	6	w.	G. W. Van Metre, C. E
Moorefield	Hardy	900	22	48.6	+ 5.2	79	19†	18	11	49	2.75	+0.04	1.10	0	8	24[a]	3[a]	3[a]		M. S. Henkel.
Piedmont	Mineral	919	5	45.9		75	19†	17	11	42	2.71		1.16	T	8	22	3	6	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	20	47.3[a]	+ 5.1	79[a]	31	15[a]	11	48[a]	2.54	−0.60	1.60	0	7	14	12	5		Geo. E. Arnold.
Upper Tract[a]	Pendleton	1,230	19	47.0	+ 4.1	79	1	16	11	56	3.40	+0.83	1.40	0	9	19	4	7		J. M. Mallow.
Wardensville	Hardy	1,200	0	45.5[b]		76[c]	19†	10[b]	11	45[b]	2.70		0.91	T.	6	15[c]	5[c]	8[c]	w.	Luther F. Sutton.
Averages and	extremes			45.7	+ 4.3	79	1†	9	11	56	2.97	−0.18	1.78	0.2	8	18	6	7	w.	
Northern Division.																				
Bens Run	Pleasants	622	16	46.6	+ 3.7	79	20	19	11	46	3.96	−0.36	2.40	0	10	22	2	7		J. D. Riggs.
Brandonville	Preston	1,809	7								3.42		0.88	T.	7					W. H. Miller.
Buckhannon	Upshur	1,411	21	45.6	+ 6.1	74	20	17	11	40	6.51	+1.93	2.40	0	10	18	4	9		H. A. Darnall,
Cortland	Tucker	3,300	2								5.14		1.70	0	6					Samuel Harmon
Creston	Wirt	701	16	48.3	+ 4.8	76	20	18	11	45	4.86	+0.81	1.83	0	10	17	1	13	sw.	J. M. Reed.
Davis	Tucker	3,093	9								2.79		1.19	1.0	6	19	5	7	sw.	Ross C. Male.
Elizabeth	Wirt	646	6								4.88		2.00	0	9					E. D. Ball.
Elkins	Randolph	1,947	17	44.4	+ 5.3	75	20	14	11	46	5.61	+1.54	2.36	T.	12	12	7	12	nw.	U. S. Weather Bureau,
Fairmont	Marion	883	12	44.2	+ 2.9	78	20	17	11	47	3.03	−0.32	0.88	T.	10	18	3	10	w.	F. P. Hall.
Glenville	Gilmer	738	24	49.1	+ 5.3	79	20	11	11	50	5.56	+1.28	2.03	0	9	18	5	8	w.	Howard R. Brannon.
Grafton	Taylor	1,000	25	46.2	+ 3.7	79	20	15	11	50	3.09	−1.00	1.50	T.	7	15	7	9	e.	W. C. Byers.
Lost Creek	Harrison	1,026	20	45.8	+ 3.4	76	20	13	11	46	5.09	+0.98	2.10	0.5	12	18	3	10	w.	Allen Smith.
Mannington	Marion	974	15	45.2	+ 2.9	77	20	15	11	46	2.85	−1.04	0.88	0.4	12	13	9	9	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	25	46.8	+ 4.8	77	20	13	11	46	1.87	−1.92	0.60	0	7	18	2	11	sw.	R. W. Muldoon.
Moundsville	Marshall	642	15	42.4[a]		82[a]	20	16	11	56[a]	1.57	−1.91	0.65	T.	4	18	1	12	sw.	M. Z. White.
New Cumberland[b]	Hancock	987	20	42.4	+ 2.6	74	20	13	16	43	1.55	−1.90	0.46	1.1	8	16	8	5	sw.	M. F. Smith,
New Martinsville	Wetzel	634	24	46.6	+ 3.4	80	20	17	11	45	1.99	−1.79	1.05	T.	7	17	2	12	s.	Wm. Ankrom,
Parkersburg	Wood	638	31	47.8	+ 5.5	77	20	21	11	37	3.54	−0.28	2.41	T.	11	14	6	11	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	18	44.8	+ 5.3	82	20	9	11	50	3.17	−1.08		1.0		16	6	9		J. W. Swisher.
Philippi	Barbour	1,149	21																	Okey J. Robinson.
Pickens[a]	Randolph	2,697	15	46.2	+ 5.2	77	31	14	10†	46	7.07	+1.19	3.60	2.0	14	17	4	9	w.	Dr. J. L. Cunningham,
Rowlesburg	Preston	1,375	31								3.86	−0.47	1.05	T.	10				w.	J. F. Pierce.
Saint Marys	Pleasants	577	9								4.22	+0.49	1.50	0	9					Wm. Hughes.
Smithfield ††	Wetzel	835	12	43.8	+ 2.2	80	20	14	11	50	2.87	−1.35	.83	T.	12	24	2	5	se.	G. M. Whisler.
Terra Alta[a]	Preston	2,612	17	42.4	+ 3.6	68	20	9	11	42	3.00	−2.09	1.00	0	8	14	9	7	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	17																	C. P. Waugh.
Weston	Lewis	1,026	22	48.3	+ 4.8	77	20	18	11	45	5.45	+1.37	2.40	T.	12	13	11	7		Weston State Hospital.
Wheeling	Ohio	645	31	44.6	+ 2.9	85	20	16	10	51	1.59	−1.62	0.58	0.6	10	19	3	9	w.	Miss M. B. Forsyth.
Averages and	extremes			45.7	+ 4.3	85	20	9	11	56	3.83	−0.29	3.60	0.3	9	16	5	10	w.	
Southern Division.																				
Bancroft	Putnam	574	13	48.0	+ 3.8	82	5	20	11	53	3.53	−0.55	1.48	0	8	20	1	10	ne.	R. E. Dent.
Beckley ††	Raleigh	2,440	17	50.4	+ 7.4	74	22	19	2	51	3.37	−0.54	1.00	T	8	11	5	15	se.	John A. Ewart.
Bluefield	Mercer	2,558	22	50.2	+ 6.6	72	6	20	11	41	4.11	+0.36	0.86	0	11	19	3	9		Norfolk & Western Ry
Camden-on-Gauley	Webster	2,062	2								8.72		2.30	T.	9	7	1	23	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	14	51.9	+ 3.2	79	22	26	27	49	6.85	+2.52	1.88	0	10	12	1	18	w.	C. V. Lewis.
Clay	Clay	706	1								3.79		1.62	0	5					Prof. E. H. Knabenshue
Cuba	Jackson	650	15	48.1	+ 4.3	78	20	17	11	48	4.45	+0.80	2.93	T.	9	18	6	7	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	1								4.05		1.56	T.	13					Lockmaster.
Dam 20 O. R.	Wood	551	1								4.41		1.90	0	9					Lockmaster.
Dam 22 O. R.	Jackson	538	2								4.94		1.89	T.	10					U. S. Engineer Office.
Dam 26 O. R.	Mason	505	1								3.86		1.75	0	7					U. S. Engineer Office.
Elkhorn	McDowell	1,933	24																	J. J. Lincoln.
Evans	Jackson	606	5	47.6		74	22	22	11	35	4.44		2.72	0	10	22	9	9		B. F. Sayre,
Gary	McDowell	1,426	1								6.35		1.04	0	11					U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	21	47.2	+ 4.1	77	19	12	11	59	4.44	+0.08	0.92	T.	10	13	4	14	w.	W. H. Gwinn.
Hinton	..do	1,450	20	47.4	+ 3.3	74	6	22	11	43	4.56	+0.49	1.16	0	10	12	2	17	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	5					16[r]	11		9.37			T.	10					R. C. Ferguson.
Huntington	Cabell	538	23	48.2	+ 3.8	77	22	24	11	47	4.04	−0.38	2.40	T.	13	18	0	13		L. H. Hutchinson.
Kayford	Kanawha	1,335	1								6.07		1.55	0	12					Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	17	46.8	+ 4.6	73	19	19	16	47	5.08	+0.99	1.83	0	8	14	9	8	nw.	Geo. T. Argabate.
Logan	Logan	687	14																	Agent C. & O. Ry.
Madison	Boone	704	11																	S. E. Bradley.
Marlinton	Pocahontas	2,131	18	40.3	+ 1.7	66	14†	10	11	44	6.52	+2.23	3.46	T.	11	8	12	9	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	24																	Miss Donna Tully.
Point Pleasant	Mason	553	24	48.6	+ 3.5	79	22	18	11	49	3.82	−0.50	2.52	0	9	15	4	12	sw.	W. D. Holmes.
Powellton	Fayette	933	21																	S. C. Lampert.
Rainelle	Kanawha	2,425	1																	C. N. Bobbitt.
Raleigh	Raleigh	2,130	1								3.63		1.05	T.	9					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	1								6.95		2.55	0	7				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	17	47.0	+ 2.4	78	20	18	11	51	4.87	+0.71	1.61	0	10	12	3	16		E. C. Brace, Jr.
Ryan	Roane	700	14	47.1	+ 3.4	78	6†	15	11	52	5.71	+1.31	3.06	0	11	14	10	7		Wm. E. Ryan,
Sissonville	Kanawha	625	1								3.69		1.28	0	5				w.	J. N. Johnson.
Spencer ††	Roane	784	13	47.6[a]	+ 5.2	77[a]	20†	21	11†	45	7.40	+3.59	3.30	0	8	0	24	7		A. M. McKown.
Sutton	Braxton	839	11	48.2	+ 2.8	78	1	17	11	46	7.78	+4.07	4.80	T.	9	22	2	7		C. B. Eakle.
Union	Monroe	2,250	13	47.2[a]	+ 4.5	76[a]	22	18	11	46[a]	3.65	−0.18	0.70	0	6					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	7	47.3		75	14†	17	16	47	5.40	+0.78	1.50	0	8	26	1	4		J. M. Ayres.
Williamson	Mingo	660	17	49.8	+ 3.0	76	19	27	16	44	4.93		1.11	0	12	16	5	10	w.	J. F. Keyser.
Wilsondale	Wayne	762	0																	Emory R. Noel.
Averages and	extremes			47.7	+ 3.7	82	5	10	11	53	5.11	+0.85	4.80	T.	9	16	4	11	w.	
State averages and	extremes			46.4	+ 4.0	85	20	9	11	56	4.26	+0.12	4.80	0.1	9	16	5	10	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

z Approximated by the observer.

Daily Precipitation for March, 1918.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac	.19			.12	.20		.10		.40	.36		.62	1.78	1.25	.40									.63	.12						5.57
Brandywine	do					.12		.25		.13	.10		.08	1.50	.22							.95	T.		.28	.14						3.77
Burlington	do				T		T.			T.			T.	1.35	.20										T.							1.55
Harpers Ferry ‖‖	do				.38			.10			.20			.10	.55	.40									.58		.10					2.41
Martinsburg	do				.38			.10		.37			.05	.84	.37							.10				.10						2.31
Moorefield	do				.02	.20		.15		.28				1.10	.40							.46				.14						2.75
Piedmont	do		T.			.29	.03	T.	.02		.42			.19	1.16	.42	.18									T.	T.	T.					2.71
Romney	do				.10		.10			.35	.05			1.60	.30											.04						2.54
Upper Tract	do					.10		.20		.25			.20	1.40	.20		.15					.60			.30							3.40
Wardensville	do					.25		.50		.32	T		T.	.61	.91	.11						T.					T					2.70
Northern Division.																																	
Bens Run	Ohio	.04			.47			.07		.31	.05		.02	2.40	.35							.05				.20						3.96
Brandonville ‖‖	Monongahela					.88		.23		.08	.45	T.	T.	.63	.75	.40				T.												3.42
Buckhannon	do	.22			.34		T.	T.		1.12	.35		.50	2.40	.35							.73			.25	.25						6.51
Central Station	Middle Is. Creek																															
Cortland ‖‖	Monongahela					.78		.26			.60			1.20		1.70						.60										5.14
Creston ‖‖	Little Kanawha		.12			.45		.10			.15	T.	T.	1.83	1.03	.60						.10		.03		.45						4.86
Davis ‖‖	Monongahela		.03		T.			.21			T.	T.		1.10	.85	T						.10	.50		T.			T.				2.79
Elizabeth ‖‖	Little Kanawha	.08			.34						.46			2.00	1.22	.33						.07		.05		.33						4.88
Elkins ***	Monongahela	.18			.45		.38	.17		.43	.02		.47	2.31	.58	T.					T.	.36			.21	.05						5.61
Fairmont ‖‖	do		.07			.55		.14		T.	.52	T.	T	.58	.88	.16						.04	.01	T.		.08		T.				3.03
Glenville ‖‖	Little Kanawha		.02			.73		.14			.62			2.03	.97	.35						.29				.41						5.56
Grafton	Monongahela	T.			*	.50	T.	T.		.47	.14		.22	1.28	T.							.48										3.09
Lost Creek	do	.96			.40	.30	T.	.06		.48	.24		.40	2.10	.50							.26			.25	.04						5.09
Mannington	do	.08			.47	.18		.10		.45	.05		.07	.88	.40	T.						.04		.02		.11	T.					2.85
Morgantown	do	.10			.31		T.	.11		.23	T.		.06	.46	.60							T.	T	T.								1.87
Moundsville ‖‖	Ohio	T.				.21		T.		T.	.65			.18	.53										T.							1.57
New Cumberland	do	.37			.15	T.		.06		.46	.05	T.	T.	.23	.22							T.		.01								1.55
New Martinsville	do	.05			.40			.05		.30			.04	1.05												.10							1.99
Parkersburg ***	Ohio	.04			.42	T.	.01	.04		.18	T.		.30	2.20	.12							.05	.02		.16							3.54
Parsons	Monongahela	T.	.42					*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.00		.75	T.		T.					3.17
Philippi	do																															
Pickens	do	.28			.30	.19	.13	.30		.14	.17	.13	.25	3.60	.40	.20						.64			.34	T.						7.07
Rowlesburg ‖‖	do		.20			.48		.28	T.	T	.45	T.		.70	1.05	.40						.10	.05			.15						3.86
Saint Marys ‖‖	Ohio					.62		.08			.28			1.50	1.20	.12						.08		.02		.32						4.22
Smithfield ‖‖	Fishing Creek		.04			.67		.10		.02	.40			.57	.83	.08						.06	.01	.03		.06	T					2.87
Terra Alta	Monongahela	.20			.15	.20	.05			.20			.45	1.00	.75																		3.00
Wellsburg	Ohio																															
Weston	Monongahela	.15			.15	.30		.20		.35	.15		.30	2.40	.40							.55			.30	.20						5.45
Wheeling ‖‖	Ohio	.09	.01			.24		.12	T.	.01	.57	T.	.02	.12	.40	T.						T.	T.	T.		.01	T.	T.				1.59
Southern Division.																																	
Bancroft ‖‖	Great Kanawha					.66		.13		.08			.05	.90	1.48	.15											.08						3.53
Beckley	do	.16			.21	1.00				.16			1.00								.16			.52	.16		T.	T.				3.37
Bluefield	do	.05			.04	.86		.68		.11			.60								.70	.19		.55		.27		.06				4.11
Camden-on-Gauley ‖	do	.10			1.00		.60	T.		.30			2.30	1.60	2.00	T						.22			.60							8.72
Charleston ‖‖	do		.06			.87		.30	T.	T.	.10			1.60	1.88	.74	T.					.75	T.	.15		.40						6.85
Clay ‖	do		T			.66		.36					T.	1.62	.52											.43						3.79
Cuba	Sand Creek	.10			.45			.10		.15			.15	2.93	.25							.12			.20							4.45
Dam 19 O. R. ‖‖	Ohio	T.	.08			.53	.01	.08		T.	.23	T.	.03	1.56	1.00	.18						.06	.02	.01		.26						4.05
Dam 20 O. R. ‖‖	do					.51		.08			.21			1.90	1.02	.39						.04		.01		.25						4.41
Dam 22 O. R. ‖‖	do		.14			.22		.13			.14		.05	1.89	1.29	.52						.21				.35						4.94
Dam 26 O. R. ‖‖	do		.10			.25		.10						.71	1.75	.15									T.	.80						3.86
Elkhorn	Big Sandy																															
Evans	Ohio	.15			.35			.15		.11			.14	2.72	.39							.13			.09	.21						4.44
Gary ‖	Big Sandy					1.04		.96		.55	.53			.59		.11						.49	.71	.25		.73		.39				6.35
Green Sulpr. Spgs.	Great Kanawha					.92		.50		.20	.45		.35	.60	T.						.22	.58		.20	.42		T					4.44
Hinton ‖	do					.70		1.06		T.	.46			.30	.02	.06						1.16	.04		.02	.74			T.			4.56
Holcomb	do	T.			*	.79	*	1.55		*	.83		*	5.42	*	1.00						T.										9.37
Huntington ‖‖	Ohio	.04	T.		.12	.58		.08		.02	.08		.02	1.30	1.10	.14									.08	.24	.24		T.				4.04
Kaytord	Great Kanawha				*	.72		1.33	T.	T.	.20	T.		.98	1.55	.32						.22	.13	.10	*	.52						6.07
Lewisburg	do				T.	.67	T.	.78		T.	.30		.48	1.88							T.	.63		T.	.27	.12						5.08
Logan	Guyandotte																															
Madison	Great Kanawha																															
Marlinton	do	.03			.04	.85	.12	T.		.35	T.		.50	2.96	.22	T.						1.10		.03	.32							6.52
Nuttallburg	do																															
Point Pleasant ‖‖	Ohio		.10			.34		.13			.05		.06	1.16	1.36	.25										.37							3.82
Powellton																																	
Raimelle ‖	Great Kanawha																															
Raleigh ‖‖	do					1.05		.84		T.	.89			.53	.05	.03					.28	.04			.42		T.					3.63
Renick ‖	do					1.00		.20			.30			1.90	2.35							.40	.80									6.95
Robertsburg ‖‖	do		.08			.55		.25			.35		T.	1.00	1.61	.57						.05		.06		.35						4.87
Ryan	do	.13			.61	.04	.08	.45		.05	.05		.18	3.06	.91										.15							5.71
Sissonville ‖‖	do					.70								1.28	1.16	.27								T.	.28							3.69
Spencer ‖‖	Little Kanawha		T.			.60		.09			.37			2.00	3.30	.76						.10				.18						7.40
Sutton	Great Kanawha	.13			.48			.65		.11	.31		.30	4.80	.64							.36										7.78
Union ‖	do					.70		.70		T.	.25			.70								.70				.60						3.65
White Sulphur Spgs.	do	T.				.65	.10	.85		T.	.35		.60	1.50	T.	T.						.95			.40							5.40
Williamson ‖‖	Big Sandy		.05			1.11		.86			.12			.66	.02	.03						.66		.30	.30	.58		.24				4.93
	do																															

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for March, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	56	48	41	48	50	61	56	48	56	57	48	56	56	62	56	47	48	60	64	66	68	63	58	55	38	27	45	49	58	61	66	53.9
	Minimum	20	18	20	21	34	35	21	20	28	15	9	35	45	43	30	24	29	30	30	31	39	33	31	30	20	18	14	18	20	41	40	27.2
Brandywine	Maximum	70	65	55	50	71	74	55	57	55	58	53	48	55	76	68	60	57	71	75	76	64	74	70	58	51	49	55	55	60	70	73	62.2
	Minimum	42	22	32	19	38	37	35	18	28	27	14	35	46	49	37	17	24	28	28	29	52	40	40	38	35	31	18	20	20	21	32	30.7
Burlington	Maximum	66	58	58	40	66	72	59	54	45	63	55	57	59	63	57	56	59	68	74	75	65	77	60	53	54	44	52	53	58	68	73	60.0
	Minimum	35	23	31	19	33	35	27	21	31	24	15	27	49	46	30	18	21	40	32	28	48	39	35	32	37	28	21	20	21	23	32	29.7
Martinsburg§	Maximum	50	59	52	43	68	73	44	56	64	41	51	50	55	54	46	59	63	72	77	72	61	77	59	50	56	43	52	55	61	70	76	58.4
	Minimum	36	29	29	25	25	31	42	35	25	37	19	19	44	40	39	21	22	34	42	36	38	50	38	31	32	35	26	27	30	30	30	31.8
Moorfield	Maximum	67	67	63	53	74	78	72	60	58	65	60	58	57	60	63	65	61	75	79	78	70	78	71	60	57	54	55	57	64	73	79	65.5
	Minimum	37	24	34	20	37	37	36	20	32	30	18	34	48	49	39	19	23	39	30	29	31	46	39	36	35	34	21	23	23	25	31	31.6
Piedmont	Maximum	64	57	52	41	64	65	63	52	49	63	58	54	55	62	62	56	57	69	75	73	67	75	61	55	53	46	54	50	59	69	74	59.8
	Minimum	37	28	35	22	35	37	29	27	33	24	17	29	49	46	32	22	27	37	40	32	49	43	34	32	36	30	21	23	24	27	34	32.0
Romney	Maximum	70	64	60	57	70	76	73	55	61	69	59	56	55	59	64	63	60	75	78	76	68	70	50	57	57	57	....	56	65	73	79	64.4
	Minimum	35	24	26	20	34	35	33	33	20	27	15	32	40	17	35	17	22	38	36	50	51	38	35	37	35	22	....	21	21	25	32	30.2
Upper Tract	Maximum	79	76	75	57	70	71	68	60	55	55	63	56	54	56	54	75	63	70	75	74	66	70	65	55	50	55	55	59	60	....	....	63.2
	Minimum	23	25	25	20	40	42	35	21	30	20	16	37	48	37	48	45	20	29	31	31	49	39	37	32	36	21	29	22	23	26	....	30.9
Wardensville §	Maximum	68	62	60	67	70	75	....	56	62	50	50	48	54	63	64	59	60	70	76	74	64	76	60	50	46	53	50	....	48	66	74	61.2
	Minimum	34	23	26	36	40	36	....	20	34	28	10	30	32	30	33	22	26	32	26	28	45	38	38	30	28	38	24	....	23	26	29	29.8
Northern Division.																																	
Bens Run	Maximum	43	55	54	44	68	62	50	55	72	71	58	54	56	72	56	55	57	67	74	79	72	67	62	49	56	46	53	58	58	69	72	60.1
	Minimum	37	26	27	27	42	42	29	25	38	25	19	35	50	47	30	21	28	33	33	37	49	41	35	43	32	30	32	26	26	29	34	33.2
Buckhannon	Maximum	61	53	48	54	65	69	55	50	64	60	53	51	62	72	57	50	54	60	68	74	65	70	61	58	48	44	48	48	60	60	70	58.5
	Minimum	39	27	32	24	43	45	30	23	34	25	17	33	50	36	34	30	25	29	30	34	53	42	38	34	36	30	20	24	25	34	40	32.8
Creston	Maximum	67	57	57	50	72	66	55	52	74	72	56	63	57	72	60	55	56	71	75	76	70	75	65	58	57	54	56	59	69	72	74	63.6
	Minimum	39	26	27	26	37	44	32	22	34	27	18	30	51	51	36	22	25	28	33	36	52	44	40	46	32	29	21	25	27	30	34	33.0
Elkins	Maximum	66	55	45	48	67	67	48	49	63	62	55	54	70	72	47	50	53	63	66	75	64	69	63	55	47	39	46	51	59	64	70	58.1
	Minimum	33	27	26	21	44	42	25	21	31	20	14	42	52	47	24	18	23	37	27	29	50	42	38	42	32	26	17	20	23	26	31	30.6
Fairmont§	Maximum	54	55	53	52	63	63	37	54	68	30	55	53	66	72	44	54	58	68	71	78	67	72	60	55	55	40	53	56	62	68	73	58.4
	Minimum	39	26	29	24	28	44	29	25	27	27	17	22	44	51	35	18	21	21	32	34	37	41	34	35	29	30	19	23	27	28	30	29.9
Glenville	Maximum	76	59	60	59	73	73	64	59	73	73	61	65	61	75	63	57	58	71	76	79	77	76	76	65	57	56	55	61	70	71	73	66.8
	Minimum	40	25	25	23	38	43	31	20	33	26	11	31	51	52	36	19	22	25	27	35	52	44	39	45	29	30	18	22	24	27	31	31.4
Grafton	Maximum	60	57	51	53	68	65	54	54	71	67	59	53	58	73	59	51	58	69	71	79	67	71	62	57	54	48	52	55	62	70	74	61.4
	Minimum	38	28	28	28	40	39	28	23	34	24	15	29	49	50	30	18	22	28	29	29	49	43	34	43	29	29	18	21	31	26	29	31.0
Lost Creek	Maximum	66	56	52	51	67	66	58	54	70	69	59	54	59	73	60	52	54	68	71	76	71	69	59	52	55	50	54	54	58	66	74	61.2
	Minimum	38	23	24	20	42	46	29	20	31	24	13	31	50	50	35	15	20	31	27	32	52	39	36	39	28	30	15	23	23	26	30	30.4
Mannington	Maximum	70	55	52	50	63	64	56	52	68	69	54	53	55	72	65	53	58	67	69	77	74	70	59	55	54	52	48	51	60	68	72	60.8
	Minimum	39	23	25	21	41	38	28	21	34	25	15	29	48	46	35	16	21	29	28	31	48	37	32	39	27	29	16	21	22	24	27	29.5
Morgantown	Maximum	68	53	48	52	64	63	52	53	67	68	54	52	55	72	62	53	57	66	70	77	70	68	58	54	52	50	48	46	58	66	72	59.6
	Minimum	36	27	40	28	43	51	25	27	37	22	13	43	50	54	33	16	33	38	47	40	54	44	30	41	29	26	18	23	25	29	33	34.0
New Cumberland	Maximum	44	54	54	42	60	50	41	54	47	47	52	51	53	71	53	51	56	70	71	74	63	55	50	54	50	49	62	....	....	66	73	55.8
	Minimum	33	23	29	22	42	41	23	25	34	20	22	33	45	52	25	13	29	26	40	43	36	25	27	26	15	18	22	....	....	24	30	29.1
New Martinsville	Maximum	62	57	50	44	67	62	50	55	70	68	57	53	55	72	65	52	57	67	72	80	72	67	62	52	56	50	54	54	64	70	73	60.9
	Minimum	38	25	28	32	42	42	28	25	36	23	17	35	49	50	35	20	26	31	31	37	50	40	32	40	30	30	19	27	28	28	31	32.4
Parkersburg	Maximum	67	56	48	47	69	64	41	54	75	63	56	54	66	73	48	52	56	67	71	77	73	69	60	55	55	43	48	52	61	69	72	60.0
	Minimum	32	27	34	31	42	41	30	28	41	26	21	47	53	48	28	24	30	37	38	41	55	46	37	43	34	31	25	31	33	35	38	35.7
Parsons	Maximum	63	56	55	66	65	69	57	51	65	64	57	51	57	73	56	59	56	67	71	82	60	72	69	58	52	42	51	56	64	65	74	61.4
	Minimum	35	18	20	40	39	34	26	16	26	22	9	25	47	49	29	27	18	24	24	26	42	45	35	39	32	27	14	18	19	23	26	28.2
Pickens	Maximum	60	54	52	48	72	71	54	56	60	60	50	61	66	60	61	59	....	64	65	74	62	67	67	57	52	51	58	57	68	69	77	61.1
	Minimum	32	24	32	26	42	52	24	22	28	14	39	48	50	35	18	29	....	29	33	37	47	41	39	43	30	27	17	21	24	29	35	32.2
Terra Alta	Maximum	60	47	43	47	52	58	54	42	60	58	46	47	51	62	55	52	55	57	65	68	64	67	60	54	47	48	40	48	58	64	....	54.3
	Minimum	31	25	26	26	38	50	20	20	31	16	9	35	45	49	29	30	26	26	39	41	50	45	29	32	25	21	13	20	26	38	....	30.4
Wellsburg	Maximum																																
	Minimum																																
Weston	Maximum	72	52	53	52	68	70	61	53	70	70	57	56	60	73	60	54	56	67	70	77	74	73	64	57	54	52	50	55	62	69	73	62.4
	Minimum	40	27	32	25	43	50	26	25	35	25	18	34	51	55	37	28	26	31	31	37	53	44	38	44	32	34	21	28	27	30	34	34.2
Wheeling §	Maximum	40	59	50	48	67	64	36	58	68	29	55	54	67	75	46	58	63	72	70	85	75	67	65	52	59	42	56	57	69	72	78	59.9
	Minimum	31	20	27	25	30	44	27	25	28	23	16	20	48	49	33	18	22	23	34	34	43	39	30	32	28	27	24	26	25	26	29	29.2
Southern Division.																																	
Beckley	Maximum	46	38	51	70	71	68	68	66	59	49	72	56	61	68	70	70	71	68	72	70	72	74	70	56	47	39	43	57	57	58	59	61.2
	Minimum	22	19	33	47	45	36	37	40	34	20	40	37	43	52	57	52	59	54	51	53	21	60	38	39	29	27	21	40	39	42	36	39.5
Bluefield	Maximum	69	65	62	58	66	72	66	58	70	68	60	60	66	67	63	60	56	64	69	66	55	68	68	51	52	48	55	60	63	65	65	62.4
	Minimum	47	28	34	37	46	55	33	25	38	27	20	40	51	60	31	22	35	33	35	50	49	47	48	40	38	33	32	38	34	32	39	38.0
Charleston	Maximum	67	64	55	55	76	77	70	68	64	64	65	62	60	61	60	63	62	72	76	78	71	79	75	75	69	65	65	63	70	74	73	67.7
	Minimum	40	30	27	32	41	42	32	35	37	34	38	40	42	39	41	40	41	30	27	35	40	50	44	38	32	31	26	27	32	36	40	36.1
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum	68	70	60	61	72	75	60	53	64	60	58	46	59	71	61	60	52	69	77	69	60	75	71	57	54	51	53	61	64	68	72	62.9
	Minimum	30	26	28	26	40	45	33	20	30	29	12	18	44	51	40	18	30	24	27	37	50	45	42	42	41	29	22	27	21	26	28	31.6
Hinton §	Maximum	61	63	55	60	70	74	42	54	65	40	58	55	66	73	44	55	56	67	73	70	60	73	68	50	53	52	51	59	62	68	71	60.3
	Minimum	35	29	29	32	40	44	41	29	29	38	22	23	32	52	38	24	24	30	30	32	42	48	47	47	42	33	30	30	31	31	31	34.4
Holcomb §	Maximum	58	54	59	55	80	69	41	54	67	40	60	55	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	57.7
	Minimum	40	26	24	30	39	40	31	21	28	23	16	18	39	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	28.8
Huntington §	Maximum	47	56	52	51	73	65	39	56	76	39	60	61	71	73	47	53	58	68	72	73	74	77	58	58	58	45	54	57	63	70	74	60.6
	Minimum	45	29	29	35	40	42	35	26	29	30	24	26	49	58	38	27	29	32	35	41	41	47	42	44	35	35	29	30	32	33	39	35.7
Lewisburg	Maximum	66	61	57	56	70	72	65	54	57	59	55	48	55	72	66	53	55	67	73	66	59	71	67	54	50	48	52	60	63	67	70	60.9
	Minimum	39	23	33	27	42	41	33	20	30	26	27	24	45	52	32	19	27	30	26	37	50	46	43	39	39	32	23	28	27	26	30	32.8
Marlinton	Maximum	56	54	52	44	62	64	54	48	50	44	48	46	52	66	54	50	48	60	66	62	58	64	56	48	44	42	50	52	56	60	64	54.0
	Minimum	34	20	32	18	18	32	28	16	26	20	10	20	44	46	32	16	22	24	22	28	34	40	36	38	34	32	18	16	20	22	26	26.6
Point Pleasant	Maximum	68	59	55	48	73	70	56	58	77	74	60	55	62	73	63	55	57	71	75	78	78	79	62	58	59	55	59	57	66	71	75	64.6
	Minimum	36	23	25	28	33	52	30	24	35	25	18	36	49	57	33	20	28	31	32	34	52	41	38	40	28	27	19	25	26	28	35	32.5
Powellton	Maximum																																
	Minimum																																
Robertsburg§	Maximum	48	68	54	48	75	67	42	59	69	38	69	54	68	73	45	57	57	71	77	78	73	78	61	55	56	45	54	55	65	70	74	61.2
	Minimum	45	26	27	30	37	42	33	23	24	29	18	27	44	52	37	26	26	30	31	36	37	43	42	43	34	28	23	27	29	29	36	32.7
Ryan	Maximum	60	60	63	54	73	78	59	58	72	62	62	55	61	75	60	56	56	68	57	78	78	68	69	60	51	49	60	62	70	71	69	63.7
	Minimum	40	26	24	24	36	39	33	19	31	28	15	30	50	54	35	18	18	24	39	34	26	41	43	42	28	23	17	20	26	28	36	30.5
Spencer	Maximum	60	57	56	54	72	67	57	68	75	36	62	57	70	75	56	54	59	69	74	77	70	77	63	52	57	47	54	56	54	69	....	61.8
	Minimum	44	27	28	28	40	46	34	45	34	29	21	36	47	54	34	21	26	28	30	32	40	44	43	42	23	28	21	22	27	28	31	33.3
Sutton	Maximum	78	57	58	58	66	68	68	54	71	71	60	60	58	71	71	58	58	67	70	74	74	77	77	76	64	62	62	56	63	67	72	66.0
	Minimum	40	27	29	23	28	41	22	28	32	27	17	34	32	48	32	22	24	26	28	31	51	41	43	32	28	26	22	24	25	28	31	30.4
Union §	Maximum	70	68	69	60	70	74	47	56	68	45	59	58	75	52	58	47	57	68	73	68	58	76	74	72	54	52	50	61	67	69	....	62.5
	Minimum	37	29	23	28	28	45	37	21	26	22	18	26	41	40	33	19	29	27	27	33	49	41	44	48	38	31	24	30	28	25	38	31.8
White Sulphur Spgs.	Maximum	57	64	60	57	72	74	62	56	63	61	59	52	57	75	67	56	58	69	75	71	65	74	69	60	54	53	53	61	63	69	73	63.2
	Minimum	40	22	37	23	41	39	36	19	27	28	25	22	42	50	35	17	26	27	29	34	42	46	42	38	30	28	23	30	26	23	26	31.4
Williamson §	Maximum	64	58	59	61	75	75	45	58	73	41	67	54	74	74	49	54	59	70	76	72	66	74	57	53	57	45	53	62	66	70	74	62.4
	Minimum	37	33	30	30	46	45	39	30	31	33	33	35	47	54	38	27	28	32	32	36	43	49	49	46	39	37	35	35	32	33	35	37.1

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
M.G

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

APRIL, 1918

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MAY 25, 1918

Departure of the Mean Temperature from the Normal, April, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXVI. PARKERSBURG, W. VA., APRIL, 1918. No. 4

GENERAL SUMMARY.

April was exceptionally cloudy, cool, and abnormally wet, with the heaviest snowfall of April State record. While the temperature was below the normal for the greatest part of the month, there were no exceptionally cool periods. The rainfall was well distributed throughout the month and over the State. The snowfall from the 9th to the 12th averaged from about three inches to nearly three feet, the greater amounts being received over the eastern panhandle counties. The soil was wet and cold during most of the month. Owing to a favorable March, however, farm work and growth were generally well advanced at the close of the month, and the condition of winter grains was generally good. The outlook for apples was also good, but peaches were winter-killed in many localities.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.02 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.44 inches on the 5th, and 29.55 inches on the 17th. Elkins, 30.34 inches on the 7th, and 29.56 inches on the 21st.

TEMPERATURE.

The monthly mean for the State, 46 stations reporting, was 50.3°. The mean departure from the normal for 40 stations having ten or more years of record was —1.2°. The month opened warm and the temperature was also somewhat above the normal on the 16-17th and 27-29th. Seasonally cool weather prevailed from the 4th to the 6th, 8th to the 14th, and 21st to the 25th, with the lowest temperatures occurring on the 5th and 10th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 75 per cent; 8 p. m., 62 per cent. The April averages for the same hours for the past 29 years are 75 and 63 per cent, respectively. Elkins, 8 a. m., 81 per cent; 8 p. m., 64 per cent. The April averages for Elkins for the same hours for the past 18 years are 80 and 64 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 64 stations reporting, was 5.11 inches. The departure from the normal for 42 stations having ten or more years of record was + 1.54 inches. Showers were general on the 2-3d. Moderately heavy rain set in on the 7th and turned to snow on the 9th, giving the heaviest snowfall of April record for the State on the 9-11th. In many sections of the eastern panhandle counties the snowfall averaged from 12 to more than 30 inches. Showers were also general on the 16-18th, 20th-21st, 23d-27th, and 29-30th, the rainfall being heavy in many sections on the 20th-21st.

WIND.

The average wind velocity at Parkersburg was 6.8 miles per hour, or 0.1 mile above the April average for the past 28 years. The average at Elkins was 6.3 miles per hour, or 1.3 miles above the April average for 18 years. The highest velocity at Parkersburg was 26 miles per hour from the southwest on the 17th, and at Elkins 30 miles per hour from the east on the 10th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 31 per cent of the possible amount, or 17 per cent below the April average for 20 years. The average at Elkins was 37 per cent, or 7 per cent below the April average for 19 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 14th; Bayard, 13th; Creston, 14th and 29th; Fairmont, 15th; Glenville, 11th and 29th; Grafton, 17th; Green Sulphur Springs, 14th; Hinton, 2d, 5th, and 15th; Marlinton, 14th, 17th, 19th, and 23d; New Cumberland, 14th, 15th, and 17th; Nuttallburg, 17th; Pickens, 10th, 11th, 12th, and 13th; Robertsburg, 14th; Rowlesburg, 4th, 14th, 15th, 17th, 29th, and 30th; Terra Alta, 4th; Wheeling, 6th, 14th, 15th, and 17th; Williamson, 14th, 17th, and 29th.

Frost, killing, or temperature 32° or below, after April 15: Bayard, 20th, 22d, 24th, and 25th; Beckley, 20th, 21st, and 24th; Brandywine, 16th and 28th; Holcomb, 23d; Marlinton, 19th and 28th; Moorefield, 17th; Morgantown, Moundsville, and Nattallburg, 25th; Romney, 28th; Terra Alta, 22d and 25th; Union, 22d and 23d; Upper Tract, 27th; Wardensville, 28th; Wheeling, 25th; White Sulphur Springs, 23d.

Hail: Elkins, 21st; Holcomb, 3d; Marlinton, 25th; Morgantown, 29th; Terra Alta, 2d.

Halo, lunar: Nuttallburg, 15th.

Halo, solar: Elkins, 26th.

Sleet: Pickins, 9th and 13th; Terra Alta, 13th.

Thunderstorms (dates and number of stations reporting): 1st, 1; 2d, 6; 3d, 10; 17th, 2; 21st, 3; 23d, 5; 24th, 1; 25th, 2; 29th, 3; 30th, 2.

Earthquake: A slight earthquake shock was felt at 9:10 p. m., April 9th at the cooperative stations in Buckhannon and Martinsburg.

COMPARATIVE DATA FOR APRIL.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	52.0	..	....	2.81	....	. ..	...	..	..	..
1892	50.6	87	17	4.28	....	....	....	..	..	..
1893	53.4	92	20	5.18	8.93	2.91	0.8	8	8	14
1894	50.6	90	14	3.32	5.30	1.97	1.6	12	8	10
1895	52.9	90	17	2.93	5.47	0.90	....	11	9	10
1896	57.7	95	12	2.06	4.35	0.82	....	13	12	5
1897	51.5	90	19	2.97	7.10	1.58	....	11	10	9
1898	48.0	86	2	3.14	4.86	1.40	....	10	9	11
1899	53.4	93	18	1.84	3.17	0.92	0.5	13	9	8
1900	51.8	88	16	1.35	2.08	0.43	T.	14	7	9
1901	47.5	95	18	7.05	10.70	4.95	6.0	10	4	16
1902	49.8	96	21	3.06	4.57	1.53	10.0	10	10	10
1903	51.3	91	8	4.47	7.30	2.29	0.4	11	8	11
1904	47.7	82	12	3.15	5.71	1.12	1.3	9	9	12
1905	52.2	89	14	2.78	5.57	1.10	1.5	11	9	10
1906	54.1	92	15	3.16	6.59	0.57	0.3	15	8	7
1907	45.6	92	10	3.49	6.66	1.42	6.1	8	8	14
1908	54.8	92	18	4.30	8.02	0.77	0.3	13	8	9
1909	55.0	93	10	5.04	8.57	1.70	2.4	10	11	9
1910	53.2	91	16	3.39	9.07	1.63	0.6	10	8	12
1911	49.5	88	6	4.29	7.00	0.83	1.5	9	8	13
1912	55.4	88	20	4.03	8.00	1.09	0.2	11	10	9
1913	52.4	92	12	2.99	5.48	1.61	0.1	14	6	10
1914	52.1	93	16	4.63	10.05	1.29	0.2	10	9	11
1915	55.5	101	10	1.93	5.69	0.10	T.	15	8	7
1916	50.5	90	17	3.07	5.70	1.25	4.3	9	7	14
1917	51.7	90	10	2.99	5.31	1.29	1.8	13	8	9
1918	50.3	85	18	5.11	9.14	1.88	10.4	9	7	14
Means and extremes ..	51.7	101	2	3.53	10.70	0.10	2.3	11	8	11

Climatological Data for April, 1918.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	17	44.2	− 2.6	67	17	18	5	41	4.55	+0.55	0.80	24.5	19	5	8	17	w.	G. C. Dixon.
Brandywine	Pendleton		2	49.0		77	17†	22	6	44	5.18			7.0	10	11	8	11	s.	Elmer Keister.
Burlington	Mineral	875	24	49.1	− 1.4	77	29	23	5†	41	6.50	+3.87	1.60	20.0	8	9	14	7	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	29								6.52	+3.62	2.00	10.0	7				e.	S. W. Lightner.
Martinsburg	Berkeley	435	26	50.3	− 0.2	79	29	29	6	39	8.62	+5.68			10	13	8	9	w.	G. W. Van Metre, C. E.
Moorefield [a]	Hardy	900	22	51.5	− 0.7	82	29	22	9	45	7.26	+4.45	2.00	30.0	10	21	2	6		M. S. Henkel.
Piedmont	Mineral	919	5	50.6		77	29	26	5†	39	6.75		1.52	21.0	13	9	11	10	se.	C. A. Suter, Jr.
Romney	Hampshire	824	20	52.4	+ 1.2	82	29	23	6	44	9.14	+6.46	3.33	29.0	7	6	16	8		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	19	48.6	− 2.9	77	28	23	4	47	6.30	+3.96	1.55	21.0	9	8[r]	5[r]	11[r]		J. M. Mallow.
Wardensville	Hardy	1,200	0	48.8[b]		78[b]	29	22[b]	6	41[b]	7.30		1.12	34.0	12	11[r]	7[d]	8[d]	ne.	Luther F. Sutton.
Averages and	extremes			49.4	− 1.1	82	29	18	5	47	6.81	+4.08	3.33	21.8	10	11	9	10	w.	
Northern Division.																				
Bens Run	Pleasants	622	16	52.4	+ 0.1	78	2	26	5	41	5.11		1.17	14.0	17	11	8	11		J. D. Riggs.
Brandonville	Preston	1,809	7								5.25		1.00	16.0	15					W. H. Miller.
Buckhannon	Upshur	1,411	21	50.4	− 0.6	76	28	25	5†	42	5.22	+1.01	0.95	6.5	15	13	4	13		H. A. Darnall.
Cortland	Tucker	3,300	2								5.26		1.20	12.0	7					Samuel Harmon.
Creston	Wirt	701	16	53.6	+ 0.8	83	27	26	5	44	4.75	+1.35	0.72	5.0	17	6	1	23	sw.	J. M. Reed.
Davis	Tucker	3,093	9								4.52		0.95	18.0	9	6	8	16	sw.	Ross C. Male.
Elizabeth	Wirt	646	6								4.41		0.93		14					E. D. Ball.
Elkins	Randolph	1,947	17	46.7	− 2.0	71	28	21	5	40	4.66	+1.37	1.16	11.0	23	4	8	18	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	12	49.9	− 2.3	80	27	24	5	50	4.04	+0.55	0.70	11.0	17	16	2	12	w.	F. P. Hall.
Glenville	Gilmer	738	24	54.2	+ 0.9	80	2†	23	5	50	4.79	+1.02	1.02	7.0	13	7	10	13	w.	Howard R. Brannon.
Grafton	Taylor	1,000	25	51.7	+ 0.3	78	28	24	5	50	4.34	+0.63	1.21		13	8	11	11	e.	W. C. Byers.
Lost Creek	Harrison	1,026	20	50.2	0	76	28	21	5	51	4.67	+1.27	0.85	7.5	17	10	7	13	w.	Allen Smith.
Mannington	Marion	974	15	50.5	− 0.8	75	28	23	5	46	4.25	+0.26	0.69	7.3	22	5	9	16	sw.	Jas. A. Morgan.
Morgantown [c]	Monongalia	1,250	25	52.2	+ 0.9	76	28†	25	9	36	4.03	+0.64	0.72	11.0	13	12	3	12	sw.	R. W. Muldoon.
Moundsville	Marshall	642	15	47.8[a]	− 4.5	77[a]	2	24	5	45	4.05	+0.94	0.80	7.0	16	12	6	12	se.	M. Z. White.
New Cumberland	Hancock	987	20	48.8	− 0.6	78	2	20	5	45	3.32	−0.13	0.74	6.5	14	10	9	11	sw.	M. F. Smith.
New Martinsville	Wetzel	634	24	52.3	− 0.9	78	2†	25	5	48	4.25	+0.45	0.65	7.0	19	6	8	16	n.	Wm. Ankrom.
Parkersburg	Wood	638	31	51.6	− 1.3	77	2	28	10	34	4.47	+1.56	0.86	8.7	18	6	6	18	se.	U. S. Weather Bureau.
Parsons††	Tucker	1,656	18	48.4	− 0.4	75	26†	19	5	48	4.67	+0.85	1.97	14.0	7	12	7	11		J. W. Swisher.
Philippi	Barbour	1,149	21								3.24	−0.70	1.20	12.0	10	7	15	8	w.	Okey J. Robinson.
Pickens [a]	Randolph	2,697	15	48.0	− 0.5	80	27	21	5†	45	5.95	+0.87		10.0	22	9	7	13	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	31								4.97	+0.99	1.18	5.5	14				w.	J. F. Pierce.
Saint Marys	Pleasants	577	9								4.76	+1.17	0.73	12.0	17				ne.	Wm. Hughes.
Smithfield ††	Wetzel	835	12	49.2	− 2.5	76	1†	22	5†	48	5.18	−1.36	0.60	8.5	18	16	9	5	se.	G. M. Whisler.
Terra Alta	Preston	2,612	17	44.6	− 2.9	67	29	19	5	31	4.40	+0.51	0.80	12.0	17	8	13	9	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	17	49.2[c]	+ 0.3	74[d]	6†	21[e]	6	53[e]			0.75	8.5						C. P. Waugh.
Weston	Lewis	1,026	22	52.2	− 0.4	76	28	26	5†	44	4.85	+0.81	0.85	7.0	16	3	20	7		Weston State Hospital.
Wheeling	Ohio	645	31	49.8	− 3.1	82	2	25	5†	51	3.79	+0.68	1.33	8.3	16	12	4	14	w.	Miss M. B. Forsyth.
Averages and	extremes			50.3	− 1.0	83	27	19	5	53	4.56	+0.79	1.33	9.6	16	9	8	13	w.	
Southern Division.																				
Bancroft	Putnam	574	13	53.3	− 0.3	85	2	26	5†	46	4.66	+0.58	0.98	5.0	16	7	1	22	nw.	R. E. Dent.
Beckley	Raleigh	2,440	17	50.3	− 0.7	82	17	24	10	41	4.23	+0.30	1.00	3.0	12	5	6	19	w.	John A. Ewart.
Bluefield	Mercer	2,558	22	50.8	− 2.8	78	24	24	10	37	4.89	+1.46	1.05	5.0	16	13	6	11		Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	2								8.51		1.60	9.0	17	2	0	28	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	14	54.5	− 2.4	80	28	26	11	41	6.03	+2.42	1.10	3.0	14	11	0	19	w.	C. V. Lewis.
Clay	Clay	706	1								1.88		0.51	5.0	7					Prof. E. H. Knabenshue.
Cuba ††	Jackson	650	15	53.0	+ 0.3	80	2	25	5	42	4.87	+1.53	0.70	9.0	15	5	17	8	nw.	Miss Faythe Howard.
Dam 19 O. R	Wood	557	1								4.91		0.98	5.0	19					Lockmaster.
Dam 20 O. R	Wood	551	1								4.51		0.97		15					Lockmaster.
Dam 22 O. R	Jackson	538	2								3.49		0.83	4.0	11					U. S. Engineer Office.
Dam 26 O. R	Mason	505	1								3.13		0.75	5.0	10					U. S. Engineer Office.
Elkhorn	McDowell	1,933	24																	J. J. Lincoln.
Evans	Jackson	606	5	54.2		76	3†	28	5	36	4.41		1.00	10.0	17	9	4	17		B. F. Sayre.
Gary	McDowell	1,426	1								4.97		0.99		17					U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	21	49.4	− 1.4	75	2	23	5	47	5.53	+2.31	1.00	14.0	14	6	4	20	w.	W. H. Gwinn.
Hinton	..do	1,450	20	49.6	− 3.7	75	19†	25	11	39	4.76	+1.56	1.08	5.0	19	6	1	23	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	5	49.4		78	2	20	15	50	5.68			10.0	17	5	8	17		R. C. Ferguson.
Huntington	Cabell	538	23	53.6	− 0.4	81	2	28	10†	43	4.96	+1.34	1.06	3.0	17	6	4	20	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	1								6.32		1.10		19					CabinCreek Con.Coal Co
Lewisburg	Greenbrier	2,200	17	48.7	− 1.6	75	29	22	5	39	5.97	+2.82	1.15	6.0	17	11	7	12	nw.	Geo. T. Argabate.
Logan	Logan	687	14																	Agent C. & O. Ry.
Madison	Boone	704	11																	S. E. Bradley.
Marlinton	Pocahontas	2,131	18	44.3	− 3.1	66	2†	20	5†	40	6.50	+2.31	1.64	8.5	20	4	11	15	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	24																	Miss Donna Tully.
Point Pleasant††	Mason	553	24			81	2				3.33	+0.05	1.72	10.0	12	3	3	24	nw.	W. D. Holmes.
Powellton	Fayette	933	21																	S. C. Lampert.
Rainelle	Kanawha	2,425	1																	C. N. Bobbitt.
Raleigh	Raleigh	2,130	1								4.99		1.01	5.0	16					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	1								6.19		1.30		12				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	17	52.0	− 1.1	81	2	26	5	47	3.91	+0.19	0.90	5.0	16	5	2	23		E. C. Brace, Jr.
Ryan	Roane	700	14	51.6	− 0.9	82	2	21	5	48	4.81	+1.01	0.94	8.1	20	9	3	18		Wm. E. Ryan.
Sissonville	Kanawha	625	1								4.34		0.80		8					J. N. Johnson.
Spencer ††	Roane	784	13	51.5	− 1.2	79	2	25	5	41	4.57	+1.21	0.87	3.6	14	0	17	13		A. M. McKown.
Sutton	Braxton	839	11	51.0	− 2.2	73	2†	22	6	42	6.77	+2.48	1.32	12.0	17	12	12	6		C. B. Eakle.
Union	Monroe	2,250	13	49.2[d]	− 1.5	78[d]	3	22[e]	14	50[f]	4.40	+0.57			12					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	7	50.2		78	29	21	5	43	5.60		1.10	16.0	17	16	5	9		J. M. Ayres.
Williamson	Mingo	660	17	53.6	− 1.8	79	2†	27	10†	44	4.16	+0.24	0.95	2.0	14	9	11	10	w.	J. F. Keyser.
Wilsondale	Wayne	762	0																	Emory R. Noel.
Averages and	extremes			50.9	− 1.7	85	2	20	5†	50	5.02	+1.40	1.64	6.8	15	8	5	17	w.	
State averages and	extremes			50.3	− 1.2	85	2	18	5	53	5.11	+1.54	3.33	10.4	15	9	7	14	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

r Approximated by the observer.

Daily Precipitation for April, 1918.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac		.05	.30			.18	.06	.68	.35	.50	.80	.60					T.			.41	.19	.02	.03	.01	.12	.03	.04		.03	.15		4.55
Brandywine	do		.15						.68	*	1.92	.05					T.	T.	.05			1.68		.10	T.	.40					.15		5.18
Burlington	do	T.		.40				T.	1.00	1.10	1.00	.50	.90								*	1.60		T.	T.		T.			T.		6.50
Harpers Ferry |||	do			.05			T.	.90		2.00	.65	1.10	T.							T.	1.40	T.			42						6.52
Martinsburg	do	T.		.21				*	*	3.01	*	2.55						T				2.18		.05	.34		T.			.28		8.62
Moorefield	do	T.		.26				2.00	1.20	1.20	.20	.40									1.40				.48			.04		.08		7.26
Piedmont	do	T.	.11	.26	T.			.07	.89	.53	1.52	.38	1.11				T.		T.		.68	1.00			.08	.09			.03	T.		6.75
Romney	do	T.		.17					2.25	1.50	1.53								T.			3.33	.04	T.		.32	T.		T.	T.		9.14
Upper Tract	do			.35				T.	.80	1.30	1.55	.60	.10				T.	T.			1.00	.50		T	T.					.10		6.30
Wardensville	do	.09		.15	.25				.47	1.04	1.10	1.12	.86	T.							.88	.70		.07						.57		7.30
Northern Division.																																	
Bens Run	Ohio	.30	.30	.50				.40	.60		1.17		.22				.07	.17	.06		.40		.07	.02	.10	.10	.15			.48			5.11
Brandonville |||	Monongahela.			.40	.28				.47	.52	*	.69	1.00				*	.61			.40	.14		.04	.19		.19			.32		5.25
Buckhannon	do	T.	T.	.75	.10			.25	.95	.15	.50		.25				.10	.25			.40	.55			T.	.15	.15			.55	.12		5.22
Central Station	Middle Is. Creek																																
Cortland |||	Monongahela				.90				.45	.70	1.20										.70	.90		.41								5.26
Creston |||	Little Kanawha	T.	.40	.53				.18	.72	.30	.32	.10	.20	T.				.14	.21		.05	.45	.05			.11		.43		.46	.10		4.75
Davis |||	Monongahela		.03	.16	.40				.40	.95	.90	.50	.30				T.	T.			.88	T.	T.			T.				T.		4.52
Elizabeth |||	Little Kanawha	.09	.12	.55					.85	.20	.55	.28	.08								.93	.04			.32	.11			.15	.14		4.11
Elkins***	Monongahela	.01	.01	.61	.04			.17	.90	.86	.35	.15	.11	T.			.03	.03	.02		.41	.34	.05	.08	.19	.04	.14	.01		.01	.10		4.66
Fairmont |||	do	T	.29	.45	.02			.14	.36	.70	.30	.20	.48	T.				.02	.04			.40	.13		T.	.22		.20		.06	.03		4.04
Glenville |||	Little Kanawha		.18	.50				.22	.54	.52	.35	.20	.25					T	.28		T.	1.02	.12				.55		.06	T.		4.79
Grafton	Monongahela	T.	.26	.43					1.21	*	.55		.40				T.	T.			.51	.12	.18		.18		.24			.15	.11		4.34
Lost Creek	do.	T.	.28	.62	T.			.27	.85	T.	.60	T.	.21				.05	.06			.50	.09	.18	.05	.04		.11	.02		.70	.04		4.67
Mannington	do	.05	.13	.59	.04			.35	.69	.03	.46	T.	.28				.02	.08	.02		.26	.10	.16	.01	.02	.19	.05	.18		.15	.39		4.25
Morgantown	do		.48	.51	T.		.30	.72	.10	.42	T.	.57					T.	.07				.17	T.	T.	.20	T.	.20		.13	.16		4.03
Moundsville |||	Ohio	.80		.30	.05			.03	.60		.60	.40	.10					.02	.08		.30	.05		.10	.08		.32		.22			4.05
New Cumberland	do	.01		.28	.02			.19	.58	T.	.40	.07	.17				.18	.11	T.		.02	.26	T.	.29			T			.74			3.32
New Martinsville	do	.10	.15	.65				.45	.60	T.	.60	.10	.15				.05	.15	.10		.20	.15	.05		.05	.15	.10	.20		.25			4.25
Parkersburg ***	Ohio	.34		.50			.02	.43	.44	T.	.86	.02	.13				.02	.27	.07		.25	.40		.02	.34		.06	T.	.25	.05	T.		4.47
Parsons	Monongahela						.93	T.	T.	.30	.80	.10	.20	T.			T.	T.	T.		T.	T.	1.97					T.	T.	.37			4.77
Philippi	do	.11	.05					.16			1.20				.40					.29			.45			.11	.15			.32			3.24
Pickens	do	.08		.25				*	1.23	.40	.40	.20	.10	.18			.20	.67	.05		.40	.15	.15	.23	.26	.09	*	.56		.12	.23		5.95
Rowlesburg |||	do			.30	.30			T.	.44	.67	.70	.48	.40		T.			T.	T.		.70	.25		.28	.14		.20		.06	.05		4.97
Saint Marys |||	Ohio	.08	.26	.65					.73	.23	.53	.33	.18	.06				.04	.27	T		.54	.04		T.	.25	T.	.17	T.	.22	.18		4.76
Smithfield |||	Fishing Creek	.12		.51	.52			.23	.60	.21	.60	.50	.15					.17	.13			.40	.17		.02	.23		.35		.15	.12		5.18
Terra Alta	Monongahela		.12	.25				.15	.80	.20	.60	.40	T.	T.							.45	.30	.15	.15	.10	.10	.22	.10		.25	.06		4.40
Wellsburg †††	Ohio							.33	.37		.75		.17					.18	.04		.11	.08		.23			T.	.21		.33			2.80
Weston	Monongahela	.05		.60				.30	.80	.10	.60		.30					.15	.15		.65	.20	.15			.10		.55		.10	.05		4.85
Wheeling |||	Ohio		.10	.22	.04			.01	.66	.16	.35	.98	.18	T.				.03	.07			.25	.10		.09	T.		.26	T.	.29	T.		3.79
Southern Division.																																	
Bancroft |||	Great Kanawha			.72				.13	.98	.25	.23	.25	.17	.24					.30		.33	.35			.28	.06		.16		.07	.14		4.66
Beckley	do							.16	1.00	.18	.30	.10	T.				.21		.05	.50	.78	.22								.42	.31		4.23
Bluefield	do			.34	.02			.35	1.05	.20	.45	.08					.13	.37	.06		.84	.15			.05		.15	.19			.37		4.80
Camden-on-Gauley |||	do	.10		.88				.11	1.60	T.	.20	.20	.30	.20			.33	.85	.22		.60			1.00	.70		1.00	.11		.11			8.51
Charleston |||	do	T		.38	T.			.25	1.00	.45	.90	1.10	.15	.10				T.			.10	.80			.30	.10		.30		.10			6.03
Clay |||	do		T.						.33	.42	.51						.16	.22	T.	.11			T.	.13		T.		T.	T.		1.88
Cuba	Sand Creek	.25	.15	.55				.40	.25	.50	.70		.20					.53			.40	.30	T.	T.	.16	.15	.10			.23		4.87
Dam 19 O. R. |||	Ohio	.08	.37	.56					.81	.06	.40	.23	.02	.22				.04	.30			.98	.05		.01	.32	.01	.05		.20	.20		4.91
Dam 20 O. R. |||	do		.35	.57				T.	.80	.09	.20	.28	.11	.09				.03	.31			.97	.04			.32		.07		.28			4.51
Dam 22 O. R. |||	do	.10	.09	.50					.83	.09	.33	.31	.08	.11					.40		T.	.65	T.										3.49
Dam 26 O. R. |||	do	T.	T.	.40					.75		.08	.30		.10			T.		.55		T.	.55			T.	.10				.10	.20		3.13
Elkhorn	Big Sandy																																
Evans	Ohio	.06		.44				.45	.51	.05	1.00	.05	.14					.50	.05		.30	.33	.03		T.	.16	.05	T.		.20	.09		4.41
Gary |||	Big Sandy		.04	.40				.48	.99	.92	.16		.06	.21				.22	.35	.02	.49	.05			.16		.34			.02		4.97
Green Sulpr. Spgs.	Great Kanawha	.25						.50	.96	.22	1.00		.18				.25	.15			.60				.30	.20	.35	.22		T.	.35		5.53
Hinton |||	do	T.	.02	.12	.06			.24	.54	1.08	.52	.10	.10	.08			.04	.08	.18		.38	.60	.02		.16	.04		.40			T.		4.76
Holcomb	do	T.		.42				.36	*	*	1.73		.51				.10	.15	.30		.34	.08	.11	*	.53		*	.75		T.	.30		5.68
Huntington |||	Ohio	.04		1.06				.10	.84	T.	.30	.14	.04	T.			.08	.02	.86		.18	.48			.22	.14	T.	.20		.14	.12		4.96
Kaylord |||	Great Kanawha		*	.44	.02	T.		T.	1.10	1.03	.27	.29	.17	.30	T.			.07	.53	*	.18	.65			.51	.23	T.	.38		.07	.08		6.32
Lewisburg	do	.05		.24				.22	1.15	.63	.57	T.	.35				.07	.14		.04	.83	.29			.13	.22	.60	.27		T.	.17		5.97
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do	.04		.52				.32	1.32	.44	.42	.12	.25	T.			.10	.11	.04	T.	.92	.34		.18	.14	.34	.38	.28		.06	.18		6.50
Nuttallburg	do																																
Point Pleasant |||	Ohio		.05					.24	.51		1.00	.72	.21				.05	.03			.15			.12		.10			.15			3.33
Powellton																																	
Rainelle |||	Great Kanawha																																
Raleigh |||	do	.04	.43	.04			.72	.19	1.01	.40	.08	.05	.18								.21	.46			.30		.30	.30			.28		4.99
Renick |||	do			.40				.30		1.30	.50	.65		.25							.15		1.17			.20	.20		.83		.24		6.19
Robertsburg |||	do	.05	.20	.30				.05	.90	.14	.30	.18	.06	.16					.56		.06	.69			.04	.06				.16			3.91
Ryan	do	.08	.06	.47				.61	.94	T.	.61		.37				.06	.24	.07		.41	.13		.19	.03	.04	.20	.08	.02	.01	.19		4.81
Sissonville |||	do			.50					.31	.60	.71	T.	.80	T.	T.	T.	T.			.40	T.			.70			.32			T.		4.34
Spencer |||	Little Kanawha	T.	.10	.38				.37	.87	.37	.37	.13	.15		T.			.32				.54				.08		.43		.09	T.		4.57
Sutton	Great Kanawha	.41		.49					1.32	.15	.84	T.	.36	.42			.16	.22			.68	.35			.26	.12	.24	.48		.10	.17		6.77
Union |||	do			.15						1.15	*	*	*	*	1.30			.10			.70	.30			.10		.60					4.40
White Sulphur Spgs.	do	.05		.35				.10	1.10	.45	.80	*	.45				.10	.15	T.		.55	.35			.10	.20	.50	.20		T.	.15		5.60
Williamson |||	Big Sandy	T.	T.	.55	T.			.30	.95	.36	.20	.10	T.	.15			T.	.04	.18		.05	.32	T.		.31	.14		.45			T.		4.16
	do																																

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for April, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	60	61	58	55	59	56	58	49	36	33	31	31	34	55	65	61	67	65	58	43	58	56	64	51	54	56	64	64	66	62	....	54.3
	Minimum	42	40	35	28	18	30	31	36	29	28	26	24	25	27	30	35	50	48	43	31	33	32	42	31	32	34	37	42	41	41	....	34.0
Brandywine	Maximum	71	74	70	60	54	62	57	54	47	40	40	43	43	60	69	70	77	70	72	54	70	70	71	64	54	55	69	70	77	66	....	61.8
	Minimum	40	42	50	40	23	22	40	45	32	25	27	28	33	26	27	32	33	50	34	34	43	41	34	45	39	41	42	29	44	45	....	36.2
Burlington	Maximum	69	75	63	57	53	64	63	56	49	37	35	41	47	60	66	65	73	71	67	57	63	61	73	61	58	58	67	70	77	66	....	60.7
	Minimum	34	44	44	40	23	23	43	43	27	25	31	28	27	28	29	33	40	54	35	42	39	43	47	43	36	40	43	46	49	45	....	37.5
Martinsburg§	Maximum	75	78	60	55	56	65	64	51	37	37	36	42	47	67	71	72	77	75	67	46	59	63	75	63	60	61	66	71	79	69	....	61.5
	Minimum	36	42	49	43	30	29	30	45	36	31	32	31	31	33	33	42	42	51	48	44	37	39	46	46	37	38	41	36	41	55	....	39.1
Moorfield	Maximum	79	81	78	64	56	67	66	58	50	38	38	45	48	66	71	70	77	75	73	70	71	67	74	65	65	64	73	73	82	....	....	65.7
	Minimum	41	43	46	45	23	24	46	44	22	27	32	29	33	27	29	33	32	54	37	42	40	43	40	46	39	42	42	33	....	48	....	37.3
Piedmont	Maximum	71	75	73	56	54	65	64	54	48	38	36	49	48	64	71	69	74	72	69	63	64	65	72	64	60	57	68	71	77	67	....	62.6
	Minimum	36	42	47	42	26	26	42	44	33	31	30	29	35	34	33	35	44	49	39	40	38	41	42	41	35	45	44	35	50	46	....	38.5
Romney	Maximum	76	79	73	55	59	67	69	62	51	52	39	45	51	65	72	75	77	75	69	65	73	69	75	65	60	59	71	72	82	79	....	66.0
	Minimum	40	52	53	42	24	23	47	42	32	27	29	35	36	32	30	32	35	57	38	36	39	41	49	44	35	41	41	32	51	50	....	38.8
Upper Tract	Maximum	73	74	71	65	61	60	60	54	46	40	33	40	41	59	63	63	75	71	70	70	70	70	70	70	55	55	70	77	67	66	....	62.0
	Minimum	26	45	45	23	24	25	41	45	32	26	29	28	34	26	29	29	44	34	35	38	39	39	40	39	38	37	31	49	45	40	....	35.2
Wardensville §	Maximum	71	72	65	56	54	63	62	56	49	36	36	43	46	....	68	71	74	71	66	57	64	61	71	64	....	57	65	71	78	70	....	61.3
	Minimum	32	38	43	46	39	22	43	42	31	26	30	28	34	....	27	30	38	38	35	42	38	45	35	34	....	37	39	31	51	46	....	36.4
Northern Division.																																	
Bens Run	Maximum	69	78	60	53	57	72	60	52	44	57	52	43	56	70	76	67	73	69	65	63	61	65	63	56	68	66	76	77	73	63	....	63.5
	Minimum	60	48	45	37	26	31	46	43	33	28	35	33	36	32	36	43	45	54	42	47	47	35	50	41	34	46	47	47	48	46	....	41.4
Buckhannon	Maximum	67	72	63	60	51	58	55	55	45	42	43	39	41	65	69	67	70	69	65	62	62	56	69	52	65	65	70	76	74	69	....	60.5
	Minimum	47	48	48	48	25	46	45	45	32	25	55	30	35	36	27	39	46	47	37	50	40	38	40	40	37	44	46	43	41	46	....	40.2
Creston	Maximum	74	82	77	60	60	72	62	52	48	38	52	44	54	78	71	73	75	72	69	69	63	65	67	61	60	64	83	78	75	70	....	65.6
	Minimum	39	47	50	40	26	30	42	46	34	29	31	34	36	34	43	47	45	53	40	49	51	40	40	42	43	47	47	46	52	47	....	41.7
Elkins	Maximum	65	70	60	47	51	64	57	51	34	40	37	35	38	58	68	65	71	64	71	53	65	58	65	52	58	57	68	71	70	60	....	57.4
	Minimum	36	45	45	30	21	24	41	34	24	23	27	27	30	25	29	35	49	44	34	44	38	35	43	37	35	42	43	44	48	46	....	36.0
Fairmont§	Maximum	67	74	62	52	55	76	58	54	35	41	45	42	53	69	74	66	73	70	62	53	67	64	68	59	60	65	80	78	72	64	....	61.9
	Minimum	36	41	51	38	24	26	29	46	32	27	28	31	32	28	32	34	41	51	41	42	47	37	42	43	34	35	46	48	52	44	....	37.9
Glenville	Maximum	76	80	80	66	60	75	75	58	55	43	54	49	46	67	78	79	73	78	73	72	67	68	71	68	75	70	75	78	78	76	....	68.8
	Minimum	36	46	50	40	23	25	45	48	33	27	30	32	35	29	30	40	44	52	35	47	52	40	36	44	38	46	46	41	52	43	....	39.5
Grafton	Maximum	64	76	74	55	54	75	65	55	45	42	43	40	50	68	76	71	76	74	68	68	68	66	70	59	61	63	73	78	74	68	....	64.0
	Minimum	36	47	47	38	24	25	46	44	32	33	35	29	34	28	29	38	45	54	39	48	47	39	42	43	39	40	45	39	51	45	....	39.4
Lost Creek	Maximum	68	75	67	57	55	74	61	53	45	40	45	40	47	64	69	67	70	69	65	59	64	61	67	58	65	64	73	76	70	67	....	61.8
	Minimum	35	46	48	39	21	23	44	45	32	26	32	31	34	24	29	37	44	51	35	49	49	38	46	41	38	42	46	41	50	42	....	38.7
Mannington	Maximum	70	74	72	55	52	70	69	53	45	40	44	41	51	66	72	69	70	71	66	60	65	63	67	55	64	63	72	75	74	70	....	62.6
	Minimum	32	45	46	36	23	24	44	45	31	27	36	31	34	27	30	37	41	52	37	49	46	38	45	42	34	44	45	41	50	41	....	38.4
Morgantown	Maximum	71	74	74	51	70	65	54	43	40	40	39	....	49	....	71	72	71	68	....	60	67	62	66	52	63	62	71	76	76	67	....	62.2
	Minimum	57	57	50	34	34	44	42	30	25	33	29	....	32	....	59	44	54	40	....	44	44	36	49	39	31	47	44	50	51	45	....	42.4
New Cumberland	Maximum	65	78	72	49	54	67	64	51	41	41	42	39	58	71	73	70	68	70	54	54	62	65	59	54	57	58	70	74	74	72	....	60.9
	Minimum	45	46	37	28	20	26	46	41	29	28	32	30	33	26	30	37	46	46	33	46	43	37	42	33	26	46	42	44	43	42	....	36.8
New Martinsville	Maximum	68	78	76	58	55	74	68	64	48	40	50	44	58	70	76	74	74	72	67	60	63	66	63	55	62	65	78	77	74	70	....	64.9
	Minimum	38	30	55	35	25	30	45	45	32	28	35	32	35	29	34	41	45	55	40	49	48	40	48	41	33	42	46	44	47	44	....	39.7
Parkersburg	Maximum	69	77	62	50	52	70	58	52	38	36	50	41	55	65	73	69	75	69	60	62	61	66	60	52	67	62	71	75	73	63	....	61.1
	Minimum	48	51	42	35	30	36	47	38	30	28	36	33	35	34	39	48	51	53	42	49	41	41	49	40	36	50	49	55	52	48	....	42.2
Parsons	Maximum	70	71	60	53	55	69	60	55	45	41	47	37	41	62	65	69	69	71	72	59	67	59	63	59	71	75	73	64	60	75	....	61.2
	Minimum	41	40	40	36	19	21	45	44	30	25	29	27	31	28	26	28	29	40	31	43	42	37	35	43	42	32	47	44	45	50	....	35.7
Pickens	Maximum	78	73	61	54	59	73	57	50	38	39	35	31	33	63	....	67	68	71	77	55	68	63	63	50	60	60	80	67	67	61	....	59.3
	Minimum	35	44	47	32	21	28	40	38	25	21	29	25	28	23	....	41	46	45	45	45	48	34	36	40	36	41	40	43	47	42	....	36.7
Terra Alta	Maximum	54	63	59	47	50	59	59	50	40	32	32	36	36	50	61	58	66	64	64	54	62	54	59	49	54	50	60	63	67	58	....	54.7
	Minimum	38	46	45	31	19	32	39	38	26	21	20	24	27	25	32	34	54	48	35	37	36	32	44	33	31	40	42	43	49	41	....	35.4
Wellsburg	Maximum	....	....	....	....	57	74	65	53	53	40	41	43	61	69	74	62	72	73	69	63	63	65	64	61	64	64	72	74	74	74	....	63.3
	Minimum	....	....	....	....	21	46	43	32	27	30	32	34	26	29	34	44	45	36	40	36	39	35	31	26	36	36	39	44	40	....	....	35.2
Weston	Maximum	73	75	73	62	54	72	69	55	47	40	41	40	45	60	72	70	72	72	67	63	66	63	69	62	67	68	73	76	74	70	....	63.7
	Minimum	42	48	50	40	26	28	45	47	82	26	37	31	34	27	36	41	41	53	40	50	51	40	45	45	39	41	44	43	52	46	....	40.7
Wheeling §	Maximum	68	82	56	54	60	76	52	51	38	38	49	42	64	76	78	58	73	71	61	55	66	70	58	56	67	63	78	75	78	67	....	62.7
	Minimum	30	45	49	32	25	25	28	47	32	27	29	32	32	32	31	34	41	48	38	37	46	38	42	35	31	35	46	47	45	44	....	36.8
Southern Division.																																	
Beckley	Maximum	63	71	74	78	58	63	56	60	45	43	50	46	52	56	62	66	82	70	51	48	49	48	50	70	74	70	71	73	70	65	....	61.1
	Minimum	44	54	58	43	36	41	38	39	27	24	38	29	30	37	48	49	56	49	38	31	31	38	37	29	41	40	42	41	38	38	....	39.5
Bluefield	Maximum	60	76	70	62	54	60	55	50	48	38	50	39	44	65	70	71	72	70	72	59	65	59	72	78	72	46	58	67	65	65	....	61.1
	Minimum	40	49	52	41	26	38	43	42	27	24	30	32	32	28	33	51	51	49	44	44	44	36	40	46	44	39	40	47	49	50	....	40.4
Charleston	Maximum	75	78	78	75	72	71	68	65	60	53	53	54	57	51	67	75	78	74	74	70	69	71	74	67	66	67	65	80	79	69	....	68.5
	Minimum	40	42	48	45	39	40	41	46	40	28	26	28	30	31	30	34	46	49	41	42	47	42	41	42	42	40	49	46	51	49	....	40.5
Elkhorn	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Green Sulphur Spgs.	Maximum	71	75	70	66	70	63	50	54	51	35	43	42	45	62	72	68	74	72	68	58	68	69	71	69	54	51	65	70	72	67	....	62.2
	Minimum	39	40	40	28	23	28	37	46	30	25	32	30	30	24	29	38	43	40	39	37	46	46	34	41	40	40	41	38	48	46	....	36.6
Hinton §	Maximum	67	73	72	55	53	63	53	53	35	36	42	40	40	60	70	65	73	69	75	51	68	64	75	70	55	54	65	70	74	60	....	60.0
	Minimum	35	45	47	55	30	30	31	43	35	27	25	33	33	30	31	35	44	47	42	42	48	41	39	39	45	46	44	41	42	51	....	39.2
Holcomb §.	Maximum	76	78	70	65	60	63	64	50	46	50	47	49	60	50	72	66	71	70	73	70	69	61	69	59	59	58	62	70	71	63	....	63.0
	Minimum	40	48	50	41	30	28	33	35	30	26	26	28	28	30	20	35	40	43	33	42	34	38	32	34	40	41	38	40	50	44	....	35.9
Huntington §	Maximum	73	81	69	56	58	74	57	53	39	38	52	43	58	65	77	77	77	73	66	74	61	67	67	47	65	64	77	77	77	64	....	64.2
	Minimum	50	54	56	41	31	32	40	48	34	28	28	37	36	33	34	35	52	56	46	46	52	44	47	47	41	42	50	52	52	50	....	43.1
Lewisburg	Maximum	65	72	67	62	57	61	55	50	50	40	39	36	36	60	69	66	70	66	69	56	66	59	70	66	63	48	65	68	75	65	....	59.7
	Minimum	42	39	48	42	22	26	39	45	29	24	32	29	32	25	30	37	41	49	38	44	43	38	36	46	44	39	39	39	46	47	....	37.7
Marlinton	Maximum	60	66	60	54	52	54	54	46	44	38	36	36	38	54	62	56	64	62	64	50	60	54	60	56	50	46	60	62	66	58	....	54.1
	Minimum	32	38	40	36	20	20	38	40	28	24	28	26	30	24	22	32	40	48	32	42	40	36	46	38	40	40	36	32	44	42	....	34.5
Point Pleasant	Maximum	72	81	80	70	57	71	69	55	54	38	55	51	59	68	77	77	76	77	74	67	67	69	69	69	67	68	73	79	77	75	....	68.0
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Powellton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Robertsburg§	Maximum	72	81	65	55	59	73	57	53	40	38	53	41	58	73	77	74	76	70	65	71	61	65	66	53	68	60	74	79	75	65	....	63.9
	Minimum	42	48	49	40	26	29	32	40	40	27	27	30	34	29	30	35	49	53	43	45	52	43	42	45	40	42	49	49	47	45	....	40.1
Ryan	Maximum	72	82	68	60	63	70	60	54	49	39	48	46	49	65	77	70	76	72	69	67	61	72	65	55	72	60	73	75	70	60	....	61.0
	Minimum	36	37	50	36	21	26	46	47	33	28	33	32	35	24	29	40	41	50	36	48	50	50	36	41	38	50	42	49	50	42	....	39.2
Spencer	Maximum	72	79	67	52	55	67	57	55	43	37	52	40	52	66	72	77	71	67	67	68	64	67	67	54	68	67	72	77	62	62	....	62.5
	Minimum	41	47	48	40	25	26	42	47	43	27	27	33	33	29	34	47	49	40	42	42	51	41	44	42	40	41	49	49	49	47	....	40.5
Sutton	Maximum	72	73	73	68	66	64	64	64	48	37	37	37	46	65	72	72	73	73	72	71	63	65	70	70	66	68	72	72	68	68	....	64.3
	Minimum	33	41	46	32	27	22	25	33	32	28	27	28	35	27	32	40	43	52	31	51	46	42	46	45	40	42	47	45	43	46	....	37.6
Union §	Maximum	72	76	78	57	58	....	....	68	36	35	38	36	50	72	70	73	72	77	66	69	64	64	74	....	52	60	67	70	75	....	....	62.7
	Minimum	40	37	40	41	23	27	....	....	32	24	30	29	30	22	30	32	42	49	38	43	37	30	30	40	....	43	38	38	46	49	....	35.6
White Sulphur Spgs.	Maximum	67	74	73	67	57	67	60	56	52	45	38	39	41	63	70	69	72	71	71	63	69	64	73	70	67	50	64	68	78	68	....	62.9
	Minimum	37	40	45	51	21	25	40	44	32	27	35	29	33	25	27	34	40	52	36	45	45	39	32	47	47	40	39	35	43	46	....	37.6
Williamson §	Maximum	70	79	71	57	73	74	57	54	38	35	52	44	50	67	76	76	78	75	72	69	68	68	77	70	72	57	74	79	75	64	....	65.7
	Minimum	39	50	51	39	31	31	36	46	35	27	27	33	36	32	32	39	50	50	44	44	51	44	42	43	45	45	48	49	50	52	....	41.4

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO
RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches
M.C

NWE

UNIVERSITY OF ILLINOIS LIBRARY

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MAY, 1918

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JUNE 26, 1918

Departure of the Mean Temperature from the Normal, May, 1918.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVI. PARKERSBURG, W. VA., MAY, 1918. No. 5

GENERAL SUMMARY.

The past month was the warmest May since 1896, and the weather conditions after the 2d were much the same as those of the average June. There was practically no damage from frost, although the temperatures were near or slightly below freezing on the morning of the 2d. While the rainfall averaged considerably above the normal and was well distributed throughout the month, the distribution over the State was somewhat unfavorable. Over the northern half of the State west of the crest of the mountains the rainfall was generally much above the average, with excessive and damaging falls in a few sections. Near Big Isaac, in the southern part of Doddridge County, seven people were drowned in the early morning of May 8 as a result of a cloud-burst. Excessive rains on the 25th over the upper portions of the West Fork, Elk, and Little Kanawha basins caused destructive local floods. A flood stage of 29.7 feet was reached at Glenville in the early morning of the 26th. The rainfall was generally considerably deficient over the southern and eastern panhandle counties. Snow flurries or light snow fell in a few sections of the northern counties on the 2d. All crops made excellent growth and were in good condition at the close of the month.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.09 and 30.10 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.51 inches on the 2d, and 29.58 inches on the 10th. Elkins, 30.53 inches on the 2d, and 29.58 inches on the 10th.

TEMPERATURE.

The monthly mean for the State, 50 stations reporting, was 66.7°. The departure from the normal for 44 stations having ten or more years of record was +4.6°. The month opened cool and heavy to killing frosts were general on the 2d. The temperatures were also near or slightly below the normal on the 11th and 13-14th. Abnormally warm weather prevailed from the 3d to the 8th and during the last half of the month.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 75 per cent; 8 p. m., 61 per cent. The May averages for the same hours for the past 29 years are 75 and 64 per cent, respectively. Elkins, 8 a. m., 77 per cent; 8 p. m., 61 per cent. The May averages for Elkins for the same hours for the past 18 years are 79 and 65 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 69 stations reporting, was 4.34 inches. The departure from the normal for 48 stations having ten or more years of record was +0.74 inch. Light rain was quite general on the 1st. Except the 9th, showers were general daily from the 7th to the 15th, with heavy rainfall in sections on the 8th and 13th. Showery weather also prevailed from the 20th to the 30th, with scattered moderate to heavy falls on the 20th-21st, 23d, 25-26th, 28th, and 30th.

HAIL.

Hail storms occurred in sections of the following counties, as follows: Gilmer, 7th; Pleasants, 8th; Webster, 10th, 23d, and 27th; Wood, 7th; Putnan, 10th; Pleasants and Pocahontas, 25th; Upshur, 27th. These storms were light and caused but slight damage. A heavy hail storm occurred in the Hoy-Slanesville district, Hampshire County, on the 27th, causing much damage to crops and fruit. The width of the storm was about one and one-half miles and the hail stones ranged from one-half an inch to more than one inch in diameter.

WIND.

The average wind velocity at Parkersburg was 5.3 miles per hour, or normal, as compared with the May average for the past 28 years. The average at Elkins was 5.3 miles per hour, or 1.2 miles above the May average for 18 years. The highest velocity at Parkersburg was 33 miles per hour from the northwest on the 27th, and at Elkins 32 miles per hour from the northwest on the 10th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 55 per cent of the possible amount, or 1 per cent above the normal as compared with the May average for 20 years. The average at Elkins was 63 per cent, or 9 per cent above the normal as compared with the May average for 19 years.

MISCELLANEOUS PHENOMENA.

Frost: Heavy to killing frost was reported generally on the morning of the 2d.

Hail: Bens Run, 8th and 25th; Buckhannon, 27th; Camden-on-Gauley, 23d, 25th, and 27th; Fairmont, 7th; Glenville, 7th; Marlinton, 25th; Robertsburg, 10th and 27th; Romney, 27th and 29th; Rowlesburg, 29th; Smithfield, 28th.

Halo, solar: Elkins, 3d.

Thunderstorms (dates and number of stations reporting): 7th, 18; 8th, 15; 9th, 1; 10th, 13; 11th, 6; 12th, 4; 13th, 7; 17th, 1; 18th, 1; 19th, 7; 20th, 10; 21st, 11; 22d, 8; 23d, 10; 24th, 1; 25th, 19; 26th, 2; 27th, 13; 28th, 5; 29th, 12; 30th, 7; 31st, 2.

COMPARATIVE DATA FOR MAY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	57.2	..	....	3.18	....	....	....	..	..	..
1892	62.2	96	32	5.04	....	....	....	..	..	..
1893	59.5	92	30	4.51	6.41	1.83	....	12	9	10
1894	62.1	100	28	4.44	9.40	2.17	....	16	9	6
1895	61.6	105	29	2.60	6.31	0.79	....	12	11	8
1896	68.3	95	33	3.01	5.92	0.65	....	11	13	7
1897	57.6	90	23	4.60	7.06	2.17	....	13	10	8
1898	63.0	94	28	4.51	6.15	2.76	....	13	10	8
1899	64.1	96	35	5.17	7.68	3.17	....	11	11	9
1900	62.5	98	21	2.99	6.75	0.35	....	14	9	8
1901	61.8	96	21	6.15	8.88	2.59	....	11	10	10
1902	65.2	98	25	3.17	6.09	1.30	....	14	11	6
1903	64.3	95	20	3.03	6.24	0.80	T.	18	9	4
1904	61.8	98	25	3.55	5.80	1.54	T.	12	11	8
1905	64.2	96	26	4.95	7.96	1.90	0	12	10	9
1906	62.7	98	22	2.59	6.89	0.39	T.	15	9	7
1907	59.0	93	24	3.88	6.37	1.38	T.	12	10	9
1908	63.4	96	28	6.19	11.45	2.73	0.1	9	12	10
1909	60.8	93	21	3.82	6.05	1.80	0.1	14	9	8
1910	57.9	96	19	3.92	5.87	1.55	0	11	10	10
1911	66.0	100	22	1.46	6.35	0.03	0	20	8	3
1912	65.3	94	31	3.93	7.50	1.16	0	15	8	8
1913	61.6	95	19	5.16	8.86	1.89	0	14	8	9
1914	62.4	100	24	1.96	3.75	0.55	0	18	8	5
1915	61.1	92	29	4.22	6.85	2.56	0	10	9	12
1916	64.0	97	28	3.58	6.00	0.90	T.	14	9	8
1917	55.5	95	25	4.88	5.45	2.45	T.	11	8	12
1918	66.	97	25	4.34	10.28	1.85	T.	15	9	7
Means and extremes ..	62.	105	19	3.96	11.45	0.03	T.	13	10	8

Climatological Data for May, 1918.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	17	62.4	+ 5.3	82	12†	31	2	31	4.10	−0.24	0.84	0.5	13	12	11	8	w.	G. C. Dixon.
Brandywine	Pendleton		2	65.0	.....	89	28†	26	2	44	3.69	.....	0.85	0	14	23	4	4	s.	Elmer Keister.
Burlington	Mineral	875	24	66.2	+ 4.7	90	27	31	2	39	2.91	−0.89	1.05	0	8	8	22	1	sw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	29	.....	.....	.....	.....	.....	.....	.....	2.34	−1.38	0.82	0	6	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	26	68.9	+ 5.6	97	27	40	2	45	2.72	−1.03	1.72	0	7	20	5	3	s.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	22	70.2[e]	+ 7.1	95	31	30[e]	2	46	3.45	−0.17	0.80	0	12	25	4[e]	0	.....	M. S. Henkel.
Piedmont	Mineral	919	5	66.8	.....	91	27†	33	2	39	4.60	.....	1.30	0	13	14	16	1	sw.	C. A. Suter, Jr.
Romney	Hampshire	824	20	69.4	+ 6.8	96	27†	35	2	50	2.77	−0.89	0.67	0	10	9	19	3	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	19	65.6	+ 3.8	90	30†	29	11	43	2.43	−0.87	0.73	0	8	21	8	2	.....	J. M. Mallow.
Wardensville[b]	Hardy	1,200	0	65.6	.....	91	26†	34	2	46	3.55	.....	1.00	0	9	21	8	0	w.	Luther F. Sutton.
Averages and	extremes	.....	.....	66.7	+ 5.6	97	27	26	2	50	3.25	−0.78	1.72	T.	10	17	11	3	w.	
Northern Division.																				
Bens Run	Pleasants	622	16	68.8	+ 5.2	91	31	33	2	35	6.97	+2.52	2.85	0	9	24	3	4	.....	J. D. Riggs.
Brandonville	Preston	1,809	7	.....	.....	.....	.....	.....	.....	.....	4.82	.....	1.10	0	12	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	21	66.2	+ 4.0	89	29†	29	2	37	7.78	+3.40	1.80	0	12	23	3	5	.....	H. A. Darnall.
Cortland	Tucker	3,300	2	.....	.....	.....	.....	.....	.....	.....	3.82	.....	0.95	0	9	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	16	68.7	+ 5.1	92	31	32	2	51	3.16	−0.40	0.94	0	12	20	9	11	sw.	J. M. Reed.
Davis	Tucker	3,093	9	.....	.....	.....	.....	.....	.....	.....	2.77	.....	0.77	T.	10	18	11	2	sw.	Ross C. Male.
Elizabeth	Wirt	646	6	.....	.....	.....	.....	.....	.....	.....	4.63	.....	1.74	0	9	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	17	63.8	+ 4.7	86	29	27	2	38	5.87	+1.89	1.61	T.	13	2	18	11	s.	U. S. Weather Bureau.
Fairmont	Marion	883	12	67.8	+ 5.1	92	28†	39	2	45	5.22	+1.22	1.63	0	15	24	3	4	w.	F. P. Hall.
Glenville	Gilmer	738	24	69.8	+ 6.4	95	31	29	2	46	5.79	+1.84	1.85	0	12	24	4	3	w.	Howard R. Brannon.
Grafton	Taylor	1,000	25	68.1	+ 5.7	92	29	29	2	43	5.11	+0.75	2.00	0	9	12	15	3	e.	W. C. Byers.
Lost Creek	Harrison	1,026	20	66.4	+ 5.1	90	29†	28	2	39	6.50	+2.39	2.34	0	12	20	4	7	w.	Allen Smith.
Mannington	Marion	974	15	66.0	+ 4.6	86	26†	28	2	40	7.01	+3.07	1.50	0	16	13	12	6	sw.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	25	68.4[l]	+ 5.7	89	29	34[l]	2	35[l]	5.10	+1.51	1.15	0	12	15	2	14	sw.	R. W. Maldoon.
Moundsville	Marshall	642	15	67.2[e]	+ 4.0	88[e]	29†	30[e]	2	41[e]	7.99	+4.93	1.00	0	15	17	3	11	sw.	M. Z. White.
New Cumberland	Hancock	987	20	65.8	+ 4.9	90	27	29	2	40	4.02	+0.86	1.04	0	12	10	17	4	sw.	M. F. Smith.
New Martinsville	Wetzel	634	24	68.2	+ 4.4	90	26†	30	2	39	7.45	+3.84	1.95	0	12	20	6	5	s.	Wm. Ankrom.
Parkersburg	Wood	638	31	69.0	+ 5.7	92	31	34	2	34	3.51	+0.05	1.14	0	13	12	9	10	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	18	64.0	+ 4.6	92	26	25	2	45	4.61	+0.74	1.32	0	5	10	17	4	.....	J. W. Swisher.
Philippi	Barbour	1,149	21	67.8	+ 5.9	91	28	32	2	40	5.85	+1.63	1.90	0	8	5	15	11	w.	Okey J. Robinson.
Pickens	Randolph	2,697	15	62.8[e]	+ 4.8	89[e]	6	27	2	46[e]	10.28	+5.28	2.75	T.	11	20	6	5	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	31	.....	.....	.....	.....	.....	.....	.....	5.37	+1.09	1.05	0	14	.....	.....	.....	.....	J. F. Pierce.
Saint Marys	Pleasants	577	9	.....	.....	.....	.....	.....	.....	.....	6.37	+2.66	1.10	0	14	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	12	65.3	+ 3.8	92	30	28	2	48	6.41	+2.46	1.23	T.	13	14	16	1	sw.	G. M. Whisler.
Terra Alta	Preston	2,612	17	62.0	+ 2.4	82	12†	26	2	40	5.63	+0.59	1.15	T.	12	14	14	3	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	17	65.9	+ 5.0	90	27	28	2	42	5.30	+1.84	1.75	0	16	15	3	13	w.	C. P. Waugh.
Weston	Lewis	1,026	22	67.6	+ 4.2	88	26†	31	2	40	5.50	+1.25	1.90	0	11	11	17	3	.....	Weston State Hospital.
Wheeling	Ohio	615	31	68.1	+ 4.9	95	26†	31	2	51	4.71	+1.25	1.10	0	17	17	5	9	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	.....	66.8	+ 4.8	95	26†	25	2	51	5.63	+2.03	2.85	T.	12	16	9	6	sw.	
Southern Division.																				
Bancroft	Putnam	574	13	66.4[e]	+ 2.1	87[e]	5†	32	2	43[e]	3.66	−0.41	0.53	0	14	21	0	10	ne.	R. E. Dent.
Beckley	Raleigh	2,440	17	65.6	+ 5.6	89	11	31	1	42	2.09	−1.11	1.03	0	4	17	10	4	w.	John A. Ewart.
Bluefield	Mercer	2,558	22	61.4[e]	.....	80	28	32[e]	2	40[e]	3.28	−0.45	1.00	0	6	15	11	5	.....	Norfolk & Western Ry.
Breading	Mingo	507	0	67.9	.....	95	31	39	2	47	3.68	.....	1.15	0	9	15	14	2	.....	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	2	.....	.....	.....	.....	.....	.....	.....	6.96	.....	1.50	0	12	7	0	24	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	14	70.0	+ 3.7	96	31	33	2	47	4.12	+0.21	1.43	0	11	16	3	12	w.	C. V. Lewis.
Clay	Clay	706	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	15	68.7	+ 5.5	95	28†	30	2	43	2.56	−0.84	0.80	0	6	12	18	1	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	1	.....	.....	.....	.....	.....	.....	.....	5.54	.....	1.17	0	13	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	1	.....	.....	.....	.....	.....	.....	.....	3.27	.....	0.71	0	15	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	2	.....	.....	.....	.....	.....	.....	.....	3.79	.....	1.00	0	8	.....	.....	.....	.....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	1	.....	.....	.....	.....	.....	.....	.....	2.88	.....	0.80	0	9	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans	Jackson	606	5	68.5	.....	90	31	36	3	39	2.99	.....	1.27	0	13	9	8	14	.....	B. F. Sayre.
Gary	McDowell	1,426	1	.....	.....	.....	.....	.....	.....	.....	3.47	.....	1.21	0	11	.....	.....	.....	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs.	Summers	1,600	21	63.8[a]	+ 2.0	91	29†	27[a]	2	44[a]	4.71	+1.30	1.18	0	10	7[b]	12[b]	10	w.	W. H. Gwinn.
Hinton	..do	1,450	20	67.0	+ 2.7	92	29	34	2	45	2.82	−0.97	1.12	0	11	12	6	13	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	5	63.6	.....	90	29	27	2	45	4.96	.....	1.58	0	14	16	7	8	.....	R. C. Ferguson.
Huntington	Cabell	538	23	69.6	+ 4.7	95	31	35	2	43	2.94	−1.01	1.26	0	11	12	2	17	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	1	.....	.....	.....	.....	.....	.....	.....	3.31	.....	0.71	0	12	.....	.....	.....	.....	Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	17	64.4	+ 3.5	88	29	29	2	40	1.96	−1.77	0.49	0	11	19	7	5	nw.	Geo. T. Argabate.
Logan	Logan	687	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	18	60.8	+ 2.0	84	31	26	2	42	4.38	+0.49	0.98	0	17	3	22	6	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	24	69.6	+ 4.1	95	31	31	2	42	3.00	−0.77	0.82	0	9	7	0	24	sw.	W. D. Holmes.
Powellton	Fayette	933	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. C. Lampert.
Raleigh	Raleigh	2,130	1	.....	.....	.....	.....	.....	.....	.....	3.13	.....	0.95	0	8	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	1	.....	.....	.....	.....	.....	.....	.....	2.44	.....	0.70	0	10	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	17	67.7	+ 3.4	95	31	32	2	42	2.93	−0.63	1.12	0	11	16	2	13	.....	E. C. Brace, Jr.
Ryan	Roane	700	14	67.8	+ 5.2	93	29†	27	2	48	2.69	−0.81	0.90	0	11	17	9	5	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	1	.....	.....	.....	.....	.....	.....	.....	4.99	.....	1.57	0	7	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	13	68.0	+ 5.7	92	27†	31	2	46	2.05	−1.53	0.46	0	9	3	25	3	.....	A. M. McKown.
Sutton	Braxton	839	11	67.3	+ 2.0	93	29†	30	2	48	6.07	+1.88	1.86	0	10	21	7	3	.....	C. B. Eakle.
Union	Monroe	2,250	13	67.0[b]	+ 6.1	93[b]	28	27[e]	1	47[e]	1.85	−0.77	0.60	0	4	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	7	64.8	.....	90	29†	26	2	48	3.10	.....	0.80	0	12	25	5	1	....	J. M. Ayres.
Williamson	Mingo	660	17	68.4	+ 2.4	90	26†	55	2†	45	3.49	−0.32	0.80	0	11	16	10	5	w.	J. F. Keyser.
Averages and	extremes	.....	.....	66.6	+ 3.8	96	31	26	2	48	3.52	−0.44	1.86	0	10	14	8	9	w.	
State averages and	extremes	.....	.....	66.7	+ 4.6	97	27	25	2	51	4.34	+0.74	2.85	T.	11	15	9	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

e Approximated by the observer.

Daily Precipitation for May, 1918.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac	.19			.01			.22	.49	T.	.37	.21		.49	.12					.28	.38	T.	T.	.26		.84				.24			4.10
Brandywine	do	.05						.18	.22		T.	.25		*	.70						.49	T.	.80	.05	.22	.54			.20	.02	T.	.06	3.69
Burlington	do							.15			T.			.40						.10	.95	.30				.37				.54	.10		2.91
Harpers Ferry	do											.40			.82								.22			T.			T.	.20	.58	.12	2.34
Martinsburg	do	.05						T.	.16		T.			.47							T.		.12	.03		.17			T.		1.72		2.72
Moorefield	do							.69				.14		.21	.15						.15	.33	.02	.15		.80		.44	.26		.20		3.45
Piedmont	do	.06			T.			.15	.62	T.	.09			T.	.49					.23	.12	1.30		.09		.59			T.	.15	.65	.06	4.60
Romney	do	.03		T.				.50			T.					.52				.15	.07	.05		.15		.67				.20		.43	2.77
Upper Tract	do	T.						.15	.40						.40						.30	.15				.73		.20		.10			2.43
Wardensville	do								.50		.20		.08	.45	.30							.45	.10			.45					1.00		3.53
Northern Division.																																	
Bens Run	Ohio	.11						.36	1.00				.27	1.50						.03				.63		2.85	.22						6.97
Brandonville	Monongahela	.21	.26					T.	1.10		.30		.04	T.	.71						.24	.12		.74	.84				.10		.16		4.82
Buckhannon	do	.05						.20	1.80		.40	T.	.15	.75									.08	1.00		1.45		1.10	.30		.59		7.78
Central Station	Middle Is. Creek																																
Cortland	Monongahela	.30							.95		.15				.83							.40		.10		.70	.20		.19				3.82
Creston	Little Kanawha	.15	T.					.05	.05			.25	.20	.42	.52						T.		T.	.85		.03	.28		.31		.05		3.16
Davis	Monongahela	.30							.77	T.		.65			.75						.17			.20	.08	.14		.05		.20		2.77
Elizabeth	Little Kanawha								.51			.16	.03	1.10							.11			1.74			.35		.15			.48	4.63
Elkins***	Monongahela	.06						1.59	.01		.12	.01		1.17				T	T.	.34	T.	T.		.54		1.55	.06	.19	.04	.19			5.87
Fairmont	do	.02	.08					.24	.39		T.	.15	.02	.12	.40		.09				T.	.08		.80		.76	.65		.14		.28	T.	5.22
Glenville	Little Kanawha	.05							.23			.50	.12	.34	.32						T.	.18		1.45		.50	1.35		.65		.10		5.79
Grafton	Monongahela	.14						.40	.95		.26			.64								.18		.40		2.00		.14			T.		5.11
Lost Creek	do	.08						.34	2.00		.55			.65	T.								.04	.35		1.96		.21	.03		.31	.04	6.50
Mannington	do	.16						.33	1.15	.01	.14		.07	.65	.04							.13	T.	1.37		1.50		.71	.15	.02	.59	.08	7.01
Morgantown	do	.17						.22	.58		.37		.05	.60	.07						T.	.67	.05	1.13	.69		T.		T.	T.	.50		5.10
Moundsville	Ohio	.06						.25	.30		.32	.60	.70	.45	.48							.28	.55	.90		.60	.70		.80	1.00			7.99
New Cumberland	do	.04						.22	.01		T.	T.	.53	1.04						T.	T.	.14	.08	1.02		.58			.50	.04	.02	4.02
New Martinsville	do	.15						.40	1.95		.20	.05	.50	1.30								.15		.75		1.75		.20		.05			7.45
Parkersburg ***	Ohio	.01						.28			.20	.03	.03	1.14						.01	T.	T.	.57	.01		.67		.46		.03	.07		3.51
Parsons	Monongahela	T.						1.30			T.	1.11									.51	.40							1.32				4.64
Philippi	do	.25						.40	1.00					.20								1.00	.65	.45		1.90							5.85
Pickens	do	T						.23	2.50		.22	.10		1.72					.05			1.90		.39	.10	2.65			.42				10.28
Rowlesburg	do	.05	.24					T.	1.05			.20		.16	.65						.18	.05		.80		.70	.55		.05	.04	.65		5.37
Saint Marys	Ohio	.05	.08	T.				.23	1.10		.10	.28	.10	.65	.67									.80		.85	.90		.30			.20	6.37
Smithfield	Fishing Creek	.12						.50	1.10			.25	.10	.60	.29							.10		.80		1.23	.04		1.18		.10		6.41
Terra Alta	Monongahela	.25						.30	.65		.18		.45	.70						.12		.48		.65		1.15			.20		.50		5.63
Wellsburg	Ohio	.08						.36	.01		.21	T.	.54	.65						.15	.17	.08	.03	.91		1.75			.05	.13	.02	.16	5.30
Weston	Monongahela	.05						.20	.65		.45			.70	.05							.30		.70		1.96			.40		.10		5.50
Wheeling	Ohio	.21	.01					.24	.86		.01	.26	.75	.27	.50					T	.07	.26	.13	.57		.38	T.		.03		.12	.01	4.71
Southern Division.																																	
Bancroft	Great Kanawha	.10						.10			.37	.36	.18	.43	.52					.53	.10	.15		.19					.33	.05	.25		3.66
Beckley	do	.20						.68			.15									1.03													2.09
Bluefield	do								.27						1.00						.50			.74	.74		.03						3.28
Breading	do							.10			.30	.42		1.15						.17	.56	.58				.30				.10			3.68
Camden-on-Gauley	do	.30						.85			.35	.22		1.50							.22	.11	1.20		.10	1.00		1.00			.11		6.96
Charleston	do	.06						.20			T.	.35	.29	.75	.68					.10	.68	.30		.60			T.		.20				4.12
Clay	do																																
Cuba	Sand Creek	T						T.	T.	T.	.19	.06	T.	.70							T.	T.	T.	T.	.45		.80		.45	T.		T.	2.56
Dam 19 O. R.	Ohio	.02						.25	.18		.12	.03	.11	.49	.86						.05			1.05			.98		1.17		.23		5.54
Dam 20 O. R.	do	.08						.02	.30		.07	.15	.06	.41	.71						.05	.06		.70			.24		.30		.02	.10	3.27
Dam 22 O. R.	do								.10			.50	.10	.60	.80							.05							.55		1.00		3.70
Dam 26 O. R.	do											.50	.10	.30	.80				T.	.08	.18		.58			.10			.24				2.88
Elkhorn	Big Sandy																																
Evans	Ohio	.06							.02		.24	.22		1.27						.23	.05		.19	.12				.24	.08	.07	.21		2.99
Gary	Big Sandy	.34	.01						.09						1.04						.12	.02	.01	.43	.13	.10					1.21		3.47
Green Sulpr. Spgs.	Great Kanawha	.30						.20	.35			.25		1.18						.40	.43					1.10			.35	.15			4.71
Hinton	do	.16							.18			.08	T.	.04	.62						.90	.24	.40	.06	T.		.06		.10				2.82
Holcomb	do	.17						*	.68		.04	.25		*	1.58					T.	.47	.22	*	.38		.45		.52		.20			4.96
Huntington	Ohio	.04						T.			.18	.16	.18	.50	.76					.08	.08	.24		.04			.10	.08	.40	.10			2.91
Kayford	Great Kanawha	.31	.20						.57	.07		.17	.32		.71						.06	.56	T.	T.	.15	T.	.05		.14				3.31
Lewisburg	do							.12	.07		T.	.11		.48							.15	.03		.05	.06	.49		.33	.07				1.96
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do	.04						.36	.28		.08	.20		.51	.03		T	.08	.10	.48	.06	.58	.24	.30	.04	.98		.02			T.		1.38
Nuttallburg	do																																
Point Pleasant	Ohio								.12		T.	.12	.20	.75	.82						.19	.20		.40			T.		.20				3.60
Powellton																																	
Raleigh	Great Kanawha							.95			.05			.95							.40	.36	.07		.05	.30							3.13
Renick	do								.46			.06	.06	.13	.43					.10			.10	.20			.70			.20			2.44
Robertsburg	do	.04							.28		.25	.47	.13	.45	.67								.04		.14			.06		.40			2.93
Ryan	do	.09						.15			.90	.08		.71							.02	.01		.22	.17		.25		.07		T.		2.69
Sissonville	do	T.	.42								.47	T.	.50		1.01						T.	.70				1.57	T.	T.	.32				4.99
Spencer	Little Kanawha	T.						.17	.05			.34	.04	.23	.38				T.	T.	.18				.16						.20		2.05
Sutton	Great Kanawha	.17						.32			.25		.19	.78						.14				.38		1.86			.90	1.08			6.07
Union	do	.50											.30	.60											.45								1.85
White Sulphur Spgs.	do	.25						.08	.02			T.		.55	.15			T.	.80		.05		.10	.10	.30	.60		.10					3.10
Williamson	Big Sandy	T.						T.	.10	.30	T.	.05	.32	.15	.60						T.	.80	.65		.02	T.		.40		.10			3.49
	do																																

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for May, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	51	59	66	73	78	78	68	69	68	72	71	82	74	68	69	67	71	72	67	69	67	70	68	74	79	81	82	81	82	80	82	72.2
	Minimum	37	31	35	50	55	56	52	55	48	58	53	59	52	42	41	39	43	48	41	51	49	54	48	55	61	69	68	69	70	71	70	52.6
Brandywine	Maximum	61	70	76	80	85	84	79	76	78	85	82	77	81	76	72	74	78	80	78	82	81	84	89	78	79	87	88	89	88	85	89	79.8
	Minimum	43	26	38	54	46	43	52	53	39	58	45	58	54	52	43	42	46	45	47	50	51	55	54	54	56	57	56	59	58	60	64	50.3
Burlington	Maximum	57	69	78	80	85	87	77	77	78	85	84	87	79	75	75	75	80	83	84	82	76	79	89	71	78	89	90	88	89	83	89	80.3
	Minimum	44	31	49	55	55	48	52	55	40	47	49	54	46	46	43	42	45	48	51	58	56	63	58	45	53	70	54	62	65	61	66	52.0
Martinsburg§	Maximum	54	72	81	80	90	91	78	79	71	87	76	86	82	75	79	78	81	86	87	88	86	89	85	78	84	93	97	93	88	81	91	82.8
	Minimum	49	40	45	52	50	56	56	60	45	42	46	49	65	51	50	49	48	52	54	57	63	64	65	51	55	60	68	68	66	64	63	55.0
Moorfield	Maximum	60	76	81	85	82	92	84	....	81	89	83	90	85	77	78	80	....	88	87	89	85	90	87	81	90	94	84	91	91	88	95	84.9
	Minimum	45	30	40	64	50	....	63	....	41	60	62	57	63	51	54	44	....	50	53	61	59	61	62	47	55	65	62	63	60	63	71	55.6
Piedmont	Maximum	62	69	77	80	85	87	80	77	77	83	77	88	80	74	76	74	79	82	81	79	78	85	78	72	82	90	91	89	87	86	91	80.5
	Minimum	42	33	45	54	55	52	55	56	38	54	45	56	55	49	45	47	48	51	53	59	57	60	61	42	55	66	63	64	60	62	65	53.1
Romney	Maximum	65	75	81	84	92	93	88	80	90	80	80	92	93	74	77	82	84	85	86	86	88	87	89	77	80	94	96	94	94	91	96	85.6
	Minimum	42	35	58	56	60	58	50	57	40	45	47	55	58	50	43	45	44	48	52	58	58	56	62	45	55	70	63	55	60	62	65	53.3
Upper Tract	Maximum	68	67	75	80	85	85	85	80	75	83	82	82	80	80	76	75	79	80	82	81	81	82	84	85	76	89	86	88	89	90	90	81.3
	Minimum	29	29	40	42	52	50	46	48	54	40	40	45	46	50	45	44	43	46	52	58	54	54	53	51	58	65	66	61	61	57	63	49.8
Wardensville	Maximum	58	70	78	81	88	87	79	76	76	86	75	84	81	75	74	73	78	81	88	83	81	86	84	74	79	91	....	....	89	85	91	80.4
	Minimum	43	34	41	55	48	47	53	56	40	40	46	60	60	51	44	41	46	49	50	60	58	51	49	48	52	63	....	....	58	61	64	50.7
Northern Division.																																	
Bens Run	Maximum	56	68	78	83	85	84	79	78	81	77	69	82	79	72	82	84	85	82	80	81	84	87	79	83	83	88	89	88	89	90	91	81.2
	Minimum	41	33	54	60	50	52	58	58	60	54	47	58	53	46	56	53	53	54	55	56	62	61	60	49	62	64	70	69	69	70	64	56.5
Buckhannon	Maximum	55	65	74	78	81	83	74	73	80	75	73	86	73	69	75	80	80	83	80	87	85	85	79	82	75	87	88	86	89	85	89	79.1
	Minimum	39	29	37	57	45	47	54	68	45	40	47	55	58	48	48	46	58	51	47	50	60	60	63	53	62	65	64	63	65	65	65	53.3
Creston	Maximum	60	83	80	85	87	85	79	81	80	78	70	82	78	76	81	83	84	85	77	83	84	85	81	85	79	90	88	89	88	88	92	82.1
	Minimum	41	32	39	49	47	50	61	62	47	64	48	52	56	47	47	54	52	54	63	57	58	60	65	54	65	64	65	63	64	67	67	55.3
Elkins	Maximum	46	65	72	75	79	80	72	70	78	78	75	84	71	67	71	76	78	79	77	77	78	80	74	76	77	83	85	83	86	82	84	76.1
	Minimum	34	27	41	60	46	44	53	49	40	54	46	56	53	46	44	49	51	48	51	55	55	55	54	51	59	67	61	60	58	61	65	51.4
Fairmont§	Maximum	51	70	78	82	85	86	79	76	83	78	76	88	67	76	81	86	88	89	87	85	85	86	80	86	81	91	90	92	92	89	92	82.4
	Minimum	43	30	33	49	49	50	53	56	44	47	45	47	63	46	47	49	52	56	59	60	64	58	63	50	53	64	66	62	62	64	66	53.2
Glenville	Maximum	61	71	80	86	87	89	87	80	85	85	87	87	88	76	81	85	89	89	89	88	87	88	88	86	85	89	93	94	94	94	95	86.0
	Minimum	40	29	31	60	42	45	54	59	44	63	46	55	58	47	46	46	50	50	58	59	62	58	63	50	62	61	64	63	65	66	66	53.7
Grafton	Maximum	57	70	79	81	86	85	79	76	83	79	74	90	82	....	....	....	....	86	89	87	85	83	86	82	85	81	90	88	88	92	88	88	82.8
	Minimum	39	29	38	51	46	47	53	56	43	61	46	55	58	....	....	....	....	45	54	56	59	60	59	62	42	62	63	63	61	61	63	65	53.4
Lost Creek	Maximum	56	65	75	80	84	82	75	75	79	76	74	87	80	74	78	83	84	86	84	83	84	82	79	83	79	87	88	88	90	83	90	80.4
	Minimum	40	28	40	46	49	45	56	57	41	61	45	53	56	45	42	44	55	49	50	59	60	55	62	49	62	63	62	61	59	63	66	52.5
Mannington	Maximum	60	67	77	80	83	84	78	75	78	78	70	85	82	76	77	79	80	83	81	81	80	82	81	80	79	86	85	85	85	83	86	79.4
	Minimum	39	28	37	59	44	46	55	53	40	60	44	55	58	45	44	51	53	49	57	56	61	57	62	44	62	61	63	61	60	60	64	52.5
Morgantown	Maximum	56	67	76	78	83	83	79	76	80	77	70	86	83	72	78	82	83	86	84	82	81	83	84	81	81	88	88	88	89	87	84	80.6
	Minimum	38	33	51	59	....	....	....	....	....	61	44	58	....	....	....	....	54	57	59	62	62	61	....	61	46	62	67	....	....	....	62	69	56.1
New Cumberland	Maximum	55	69	80	79	85	87	79	74	77	77	64	79	77	73	73	79	83	85	80	80	76	85	72	80	82	86	90	88	86	83	87	79.0
	Minimum	37	29	48	59	50	53	54	54	38	47	35	54	51	42	42	50	51	49	61	63	58	57	62	41	62	67	67	64	58	61	63	52.5
New Martinsville	Maximum	60	69	79	82	86	84	80	80	80	79	65	82	80	75	82	85	87	88	85	83	81	87	85	85	83	90	86	89	89	86	90	82.2
	Minimum	39	30	41	54	49	50	57	57	44	64	46	56	55	47	48	52	52	52	49	59	52	60	64	50	63	66	67	64	63	64	67	54.2
Parkersburg	Maximum	54	68	79	82	85	83	79	76	79	78	66	84	66	73	80	83	84	86	77	80	84	86	76	84	83	90	89	88	91	89	92	80.5
	Minimum	41	34	50	60	57	55	60	59	51	52	48	60	51	44	53	57	56	60	65	61	63	64	59	52	66	69	65	64	66	67	72	57.5
Parsons	Maximum	52	63	74	78	81	85	85	72	80	71	80	86	75	75	80	84	84	84	79	80	82	83	79	76	86	92	84	84	87	83	86	79.6
	Minimum	37	25	31	47	49	49	40	55	35	50	47	50	47	39	41	46	49	50	48	54	53	45	45	55	62	60	60	59	60	60	62	48.4
Philippi	Maximum	58	67	70	80	87	75	78	74	84	79	81	85	85	71	79	80	90	87	83	84	86	88	87	85	87	89	88	91	88	83	88	81.8
	Minimum	38	32	46	58	54	52	55	58	45	42	41	45	56	46	44	49	59	58	63	60	60	60	62	47	61	66	67	62	54	63	63	53.7
Pickens	Maximum	44	73	77	76	86	87	73	75	78	76	82	83	69	69	73	73	81	76	74	....	....	83	75	70	79	87	....	77	86	83	85	76.9
	Minimum	33	27	37	55	45	50	53	51	50	54	43	53	51	44	44	47	49	51	51	58	53	53	51	52	57	62	59	56	54	60	62	50.6
Terra Alta	Maximum	49	59	65	73	77	79	70	67	77	70	72	82	70	66	68	72	70	78	78	76	76	76	70	63	74	80	81	79	82	78	81	72.8
	Minimum	32	28	49	54	55	49	52	49	37	58	38	54	51	43	46	46	48	47	54	54	56	57	56	49	59	65	62	58	58	60	64	51.2
Wellsburg	Maximum	66	68	79	77	84	83	79	75	80	75	73	81	79	72	79	82	83	85	81	83	75	86	81	82	83	88	90	87	87	86	89	80.6
	Minimum	40	28	42	42	45	47	55	54	38	56	38	51	54	42	42	47	47	48	60	57	59	57	62	41	61	64	64	61	60	62	64	51.2
Weston	Maximum	58	67	76	80	83	84	80	76	81	78	74	86	82	70	78	81	83	86	83	80	82	83	80	82	81	88	87	86	88	85	87	80.5
	Minimum	40	31	39	61	47	49	56	54	41	62	48	56	57	50	41	47	58	52	59	62	64	59	62	52	62	65	65	63	62	64	67	54.6
Wheeling§	Maximum	56	72	82	83	90	88	82	79	80	78	70	84	64	75	82	86	86	91	83	86	85	82	90	86	86	95	94	93	95	93	93	83.5
	Minimum	39	31	31	49	50	50	51	55	44	50	46	49	59	45	46	48	52	52	63	63	62	61	50	46	49	63	69	64	64	65	67	52.7
Southern Division.																																	
Beckley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bluefield	Maximum	46	71	73	73	75	80	71	75	76	76	75	76	73	76	77	76	75	80	78	75	76	78	82	75	76	77	76	85	82	83	81	75.7
	Minimum	36	32	38	42	46	49	52	50	40	46	43	44	41	46	40	46	44	43	44	48	55	48	50	69	....	....	....	....	....	....	....	45.1
Charleston	Maximum	65	79	88	89	90	87	88	84	82	83	80	85	80	76	85	86	87	90	81	80	85	91	84	90	92	93	95	91	90	94	96	86.0
	Minimum	42	33	41	45	46	50	52	56	52	51	51	55	63	49	46	47	53	55	56	55	57	58	60	61	61	64	65	63	62	62	66	54.1
Elkhorn	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Green Sulphur Spgs.	Maximum	55	69	75	80	76	78	84	78	80	81	83	84	76	73	76	73	80	81	83	80	83	85	85	78	86	89	90	90	91	91	....	80.4
	Minimum	39	27	32	37	36	35	40	40	42	41	42	43	57	44	40	49	48	47	50	47	54	57	59	59	55	56	60	61	61	61	....	47.3
Hinton §	Maximum	50	69	76	82	86	87	74	80	80	84	86	87	75	74	78	75	81	85	81	76	83	85	85	78	87	89	87	88	92	90	89	81.3
	Minimum	44	34	35	37	42	44	47	53	47	48	52	52	56	49	48	50	54	54	55	57	57	60	60	60	64	64	62	63	64	62	63	52.7
Holcomb §	Maximum	48	68	74	78	83	85	72	76	78	82	84	85	69	72	76	76	80	82	82	78	83	85	79	80	85	87	89	86	90	85	89	79.5
	Minimum	38	27	30	37	38	40	43	55	40	45	45	52	51	45	40	45	46	46	50	53	52	52	56	57	55	58	56	57	55	56	57	47.6
Huntington §	Maximum	55	75	81	86	89	81	81	83	81	79	68	84	63	77	83	86	81	85	79	81	86	85	82	88	86	90	93	93	92	93	95	82.7
	Minimum	43	35	38	50	50	53	55	65	54	56	50	52	62	46	47	51	57	59	60	61	62	62	65	60	60	68	70	66	67	67	69	56.8
Lewisburg	Maximum	54	66	74	76	80	83	75	75	75	80	82	81	74	72	73	69	77	79	78	77	82	83	78	75	80	85	85	85	88	85	86	77.8
	Minimum	39	29	35	47	41	43	53	57	43	50	45	51	55	45	46	52	58	48	51	54	57	53	60	59	53	55	59	61	58	59	59	50.9
Marlinton	Maximum	54	62	68	72	78	80	76	70	72	74	76	78	72	68	68	66	74	72	74	74	76	76	94	70	63	80	82	80	82	80	84	73.4
	Minimum	34	26	30	48	44	38	40	52	38	44	42	54	52	46	44	38	46	46	48	54	56	54	58	54	54	56	58	56	58	58	64	48.1
Point Pleasant	Maximum	62	72	82	86	88	89	83	82	81	82	73	85	82	75	83	84	85	88	85	82	87	88	83	88	90	92	93	92	94	93	95	84.6
	Minimum	41	31	40	53	47	49	63	59	47	66	43	57	52	42	45	52	51	56	62	57	59	61	60	51	66	65	65	61	62	63	65	54.5
Powellton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Robertsburg§	Maximum	53	72	77	82	87	81	81	82	81	78	70	83	64	75	80	81	89	87	81	83	86	87	86	85	87	89	93	92	92	90	95	82.2
	Minimum	42	32	35	44	46	42	53	62	42	55	46	48	53	44	46	50	53	58	62	52	59	61	63	57	56	64	66	64	63	65	66	53.2
Ryan	Maximum	60	75	80	85	86	85	78	86	85	75	74	76	70	73	84	85	86	89	76	84	85	80	84	88	88	90	92	92	93	93	93	82.9
	Minimum	42	27	36	46	41	46	53	54	48	60	44	54	54	46	43	50	50	56	62	63	58	56	60	55	63	61	62	62	58	62	63	52.7
Spencer§	Maximum	51	70	79	84	85	84	80	77	80	80	77	83	72	72	80	82	82	86	80	81	84	86	86	85	82	90	92	92	90	90	92	81.7
	Minimum	43	31	33	58	56	50	50	62	47	51	48	48	63	46	45	47	56	56	56	58	60	60	64	56	58	65	62	62	62	62	67	54.3
Sutton	Maximum	60	68	79	84	84	82	82	82	82	80	73	82	82	74	75	78	84	87	87	77	79	84	84	78	78	80	87	87	93	93	92	81.2
	Minimum	41	30	31	46	44	42	56	60	46	60	48	55	58	56	57	46	50	51	52	53	55	57	62	56	61	59	60	74	62	64	64	53.4
Union §	Maximum	....	70	....	....	83	87	78	80	78	83	83	73	....	76	72	80	....	....	79	83	83	82	....	88	88	88	90	93	89	92	....	82.5
	Minimum	27	....	40	....	....	40	50	57	43	55	45	52	48	....	45	49	50	....	....	55	55	58	59	....	55	59	60	61	57	58	59	51.5
White Sulphur Spgs.	Maximum	58	68	75	80	84	87	80	80	79	82	77	84	79	75	74	70	78	79	80	80	80	85	83	80	80	88	88	87	90	87	90	80.2
	Minimum	42	26	30	38	36	39	41	59	40	43	42	50	60	49	45	47	49	49	52	49	57	55	58	58	54	68	58	60	58	60	60	49.4
Williamson §	Maximum	53	72	80	83	88	84	78	81	78	85	85	85	65	74	80	82	85	85	73	82	82	83	80	83	87	90	89	88	89	88	90	81.5
	Minimum	43	35	35	40	45	47	51	55	52	55	52	53	60	50	50	51	55	57	58	60	61	62	63	63	64	65	66	66	67	66	67	55.3

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, May, 1918.



WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JUNE, 1918

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JULY 25, 1918

Departure of the Mean Temperature from the Normal, June, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXVI. PARKERSBURG, W. VA., JUNE, 1918. No. 6

GENERAL SUMMARY.

June was considerably cooler and slightly drier than usual, with an unfavorable rainfall distribution. Over the southeastern districts and thence northward over the central mountain counties the rainfall was heavy, delaying harvesting and cultivation, while in the northwestern and eastern counties the conditions were droughty most of the month. The greater part of the rainfall, also, fell as heavy showers. The coolest weather of record in many districts for the last decade in June occurred on the 23d-24th, when the morning temperatures were only slightly above the freezing point in many of the more elevated districts. Light frosts occurred in exposed places in the northern and central counties, while heavy to damaging frosts were noted in sections of Grant, Preston, and Tucker counties. The damage, however, was confined mostly to gardens. Growth was slow during the last two decades. At the close of the month the harvesting of wheat and rye was well advanced, with slightly more than the average yield. Oats were in good condition, but corn was small and patchy, owing to cool weather and poor seed. Potatoes were generally fair to good, except in the northwestern counties, where they are generally blighted.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 29.98 and 29.97 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.26 inches on the 8th, and 29.61 inches on the 12th. Elkins, 30.27 inches on the 4th, and 29.55 inches on the 12th.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 68.2.° The departure from the normal for 41 stations having ten or more years of record was —1.0°. The month opened warm, the highest temperatures of the month occurring on the 1st in most sections. After the 8th the temperatures were below the normal, except the 11th, 17-18th, and 29-30th, with the lowest readings on the 23d-24th, when the morning temperatures ranged generally from 35° to 45°.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 75 per cent; 8 p. m., 65 per cent. The June averages for the same hours for the past 29 years are 79 and 69 per cent, respectively. Elkins, 8 a. m., 81 per cent; 8 p. m., 70 per cent. The June averages for Elkins for the same hours for the past 18 years are 84 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 63 stations reporting, was 4.17 inches. The departure from the normal for 45 stations having ten or more years of record was —0.24 inch. Moderate to heavy showers occurred on the 6-7th, 17-18th, 21st-22d, and 25-26th, while light showers fell in many sections on the 2-3d, 11-12th, and 29-30th. The falls were excessive in many localities of the southern counties on the 25-26th.

HAIL.

While hail fell in sections of Brooke County on the 10th and Pocahontas County on the 17th, the month was free from damaging storms.

WIND.

The average wind velocity at Parkersburg was 5.2 miles per hour, or 0.7 mile above the June average for the past 28 years. The average at Elkins was 4.6 miles per hour, or 1.3 miles above the June average for 19 years. The highest velocity at Parkersburg was 24 miles per hour from the northwest on the 12th, and at Elkins 27 miles per hour from the west on the 30th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 60 per cent of the possible amount, or 3 per cent above the June average for 20 years. The average at Elkins was 52 per cent, or normal as compared with the June average for 19 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 3d, 5th, 9th, 10th, 11th, and 23d; Brandywine, 11th; Creston, 3d, 4th, and 11th; Elkins, 3d, 4th, 8th, 9th, 11th, 15th, and 24th; Fairmont, 11th; Grafton, 15th; Hinton, 1st, 18th, and 29th; Mannington, 1st, 3d, 4th, 9th, 11th, 15th, 16th, 24th, and 30th; Marlinton, 1st, 4th, 8th, 9th, 10th, 11th, 13th, 15th, 16th, and 28th; New Cumberland, 3d, 4th, 6th, 8th, 9th, 10th, 13th, 15th, 24th, and 27th; Powellton, 4th; Robertsburg, 3d; Romney, 8th, 9th, and 10th; Rowlesburg, 1st, 2d, 3d, 4th, 5th, 8th, 9th, 10th, 11th, 15th, 16th, 18th, 24th, and 30th; Smithfield, 23d and 24th; St. Marys, 3d, 4th, 5th, 15th, and 24th; Williamson, 1st, 10th, 11th, 14th, 16th, 24th, and 29th; Wheeling, 3d, 4th, 5th, 8th, 9th, 10th, 16th, and 24th.

Frost, light: Burlington, Brandywine, Davis, Romney, Terra Alta, and Wardensville, 24th; Pickens, 8th, 23d, and 24th.

Hail: Marlinton, 17th; Wellsburg, 10th.

Halo, solar: Ryan, 28th.

Thunderstorms (dates and number of stations reporting): 1st, 1; 2d, 8; 6th, 5; 7th, 3; 10th, 4; 11th, 1; 16th, 1; 17th, 10; 18th, 3; 21st, 10; 22d, 5; 25th, 5; 26th, 1; 28th, 4; 29th, 9; 30th, 10.

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	71.2	..	....	5.02	....	....	...	..	..	..
1892	74.1	99	41	3.90	....	....	....	..	..	..
1893	70.2	99	40	3.81	6.41	1.83	....	13	10	7
1894	70.4	103	32	3.27	6.78	1.25	....	16	10	4
1895	72.1	102	38	2.92	5.66	1.20	....	15	10	5
1896	69.8	95	30	5.35	9.86	0.11	....	8	14	8
1897	69.3	96	35	4.31	6.77	1.31	....	12	12	6
1898	70.9	99	41	3.21	7.50	0.66	....	14	11	5
1899	72.0	98	35	4.99	8.93	1.46	....	14	9	7
1900	71.2	98	41	5.30	15.62	2.49	....	9	12	9
1901	70.7	104	32	5.67	11.10	1.37	....	12	12	6
1902	68.0	100	33	5.19	8.49	2.45	....	11	13	6
1903	65.1	93	34	4.80	12.39	2.01	....	8	11	11
1904	69.5	97	36	4.20	8.29	2.05	....	10	13	7
1905	70.6	100	34	4.38	7.72	1.74	....	13	11	6
1906	70.9	101	38	5.25	9.32	2.84	....	11	12	7
1907	65.3	97	33	6.00	11.95	1.93	....	10	11	9
1908	69.2	98	36	3.12	6.75	1.35	....	15	10	5
1909	71.1	101	35	5.73	9.19	2.47	....	9	13	8
1910	66.6	96	32	5.67	11.27	1.52	....	10	10	10
1911	70.7	101	40	4.44	9.34	1.88	....	14	10	6
1912	67.3	95	29	4.27	9.21	1.11	....	13	10	7
1913	69.5	99	29	3.44	6.55	0.86	....	18	8	4
1914	72.9	100	39	3.00	6.60	0.62	....	15	11	4
1915	67.7	95	33	3.63	7.09	1.21	....	15	8	7
1916	65.8	94	35	5.42	14.54	2.50	....	14	8	8
1917	67.7	99	31	3.81	6.58	1.38	....	14	9	7
1918	68.2	99	34	4.17	10.11	0.87	....	16	7	7
Means and extremes	69.5	104	29	4.11	15.62	0.11	....	13	10	7

Climatological Data for June, 1918.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	17	62.6	− 0.9	85	2	38	24	41	3.71	−1.36	1.10	0	13	9	13	8	w.	G. C. Dixon.
Brandywine	Pendleton		2	65.8		92	1	35	24	44	5.44		1.40	0	13	18	3	9	sw.	Elmer Keister.
Burlington	Mineral	875	24	66.2	− 2.2	91	1	35	24	45	3.55	−0.52	1.12	0	12	12	14	4	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	29								2.20	−1.71	0.94	0	6				e.	S. W. Lightner.
Martinsburg	Berkeley	435	26	69.3	− 1.4	95	1	45	24	40	3.03	−1.29	1.03	0	13	14	8	8	e.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	22	69.8	+ 0.6	98	1	38	24	48	3.28	−1.13	0.79	0	8	26	1	3		M. S. Henkel.
Piedmont	Mineral	919	5	67.4		90	1†	38	24	43	3.15		1 33	0	12	13	10	7	se.	C. A. Suter, Jr.
Romney	Hampshire	824	20	69.4	− 0.6	97	1	37	24	48	4.19	+0.33		0	10	17	3	10		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	19	66.4[c]	− 1.3	92[c]	1	38[c]	24	47[c]	4.20	−0.25	1.20	0	7	23	5	2	w.	J. M. Mallow.
Wardensville[b]	Hardy	1,200	0	66.6		91	2	35	24	45	2.20		0.35	0	11	18	8	4	w.	Luther F. Sutton.
Averages and	extremes			67.6	− 1.0	98	1	35	24	48	3.47	−0.76	1.40	0	10	18	6	6	w.	
Northern Division.																				
Bens Run	Pleasants	622	16	69.6	− 0.6	91	1†	45	23	31	2.67	−2.09	0.60	0	8	21	4	5		J. D. Riggs.
Brandonville	Preston	1,809	7								4.89		2.09	0	8					W. H. Miller.
Buckhannon	Upshur	1,411	21	67.5	− 1.1	90	1	40	24	39	5.58	+0.65	2.20	0	8	22	5	3		H. A. Darnall.
Cortland	Tucker	3,300	2								4.19		1.50	0	6					Samuel Harmon.
Creston	Wirt	701	16	70.0	− 0.5	92	1	42	23	44	2.86	−1.52	1.13	0	5	19	3	8	sw.	J. M. Reed.
Davis	Tucker	3,093	9								3.25		1.45	0	8	15	7	8	sw.	Ross C. Male.
Elizabeth	Wirt	646	6								1.70		0.80	0	6					E. D. Ball.
Elkins	Randolph	1,947	17	63.9	− 2.7	86	1	38	24	43	5.32	+0.28	1.89	0	14	6	11	13	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	12	69.8	− 0.2	93	1	40	24	42	1.91	−2.68	0.60	0	9	25	0	5	w.	F. P. Hall.
Glenville	Gilmer	738	24	71.6	+ 1.1	95	1†	42	23	45	3.26	−1.09	1.22	0	7	15	13	2	w.	Howard R. Brannon.
Grafton	Taylor	1,000	25	69.2	− 0.1	92	1†	39	24	47	4.19	−0.49	2.21	0	5	9	17	4	e.	W. C. Byers.
Lost Creek	Harrison	1,026	20	67.4	− 0.3	90	2†	40	23	39	2.42	−1.51	0.75	0	8	19	8	3	w.	Allen Smith.
Mannington	Marion	974	15	66.9	− 1.2	88	1	35	24	43	1.09	−2.93	0.36	0	9	15	9	6	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	25	69.2[b]	+ 0.3	90	29	40[b]	24	40[b]	2.99	−1.61	1.40	0	9	18[a]	0[a]	11[a]	sw.	R. W. Muldoon.
Moundsville	Marshall	642	15	66 8	− 2.9	88	17†	40	24	33	1.90	−1.62	0.50	0	5	15	8	7	sw.	M. Z. White.
New Cumberland	Hancock	987	20	66.5[a]	− 1.4	90[a]	5	38[a]	24	42[a]	0.87	−3.80	0.39	0	7	13	13	4	sw.	M. F. Smith.
New Martinsville	Wetzel	634	24	71.2	− 0.2	92	17	41	24	48	2.05	−1.94	0.85	0	9	21	5	4	s.	Wm. Ankrom.
Parkersburg	Wood	638	31	70.0	− 1.4	92	1	45	23	36	3.39	−1.26	2.46	0	7	11	13	6	se.	U. S. Weather Bureau.
Parsons ††	Tucker	1,656	18	65.4	− 0.9	91	1	37	24	48	2.86	−2.72	2.00	0	2	19	4	7		J. W. Swisher.
Philippi	Barbour	1,149	21	67.4	− 1.0	90	2†	41	24	39	5.62	+1.12	1.78	0	9	6	18	6	w.	Okey J. Robinson.
Pickens	Randolph	2,697	15	63.3[b]	− 1.9	86[b]	1	35	23	38[b]	5.95	−0.18	1.29	0	10	22	4	4	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	31								8.24	+3.33	4.01	0	11					J. F. Pierce.
Saint Marys	Pleasants	577	9								2.08	−1.55	0.88	0	5				w.	Wm. Hughes.
Smithfield	Wetzel	835	12	66.4	− 1.6	91	1	37	24	46	2.80	−1.82	0.65	0	12	25	1	4	se.	G. M. Whisler.
Terra Alta	Preston	2,612	17	61.4	− 4.8	82	2	35	24	34	4.38	+3.43	1.50	0	8	15	15	0	e.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	17	67.6	+ 0.3	91	29	35	24	48	1.76	−2.70	0.52	0	8	21	4	5	w.	C. P. Waugh.
Weston	Lewis	1,026	22	68.6	− 2.4	90	1	42	23†	41	4.70	+0.30	1.45	0	10	15	11	4		Weston State Hospital.
Wheeling	Ohio	645	31	70.2	− 0.3	97	1	41	24	48	1.80	−2.09	0.81	0	6	17	5	8	sw.	Miss M. B. Forsyth.
Averages and	extremes			67.8	− 1.1	97	1	35	23†	48	3.34	−0.90	4.01	0	8	17	8	5	w.	
Southern Division.																				
Bancroft	Putnam	574	13	69.0[a]	− 2.1	91[a]	17	44	23	40[a]	4.30	−0.31	1.87	0	4	19	4	7	ne.	R. E. Dent.
Beckley ††	Raleigh	2,440	17	65.8	− 1.4	88	2	40	23†	38	3.86	−0.48	1.72	0	5	12	10	8	w.	John A. Ewart.
Bluefield	Mercer	2,558	22	67.4	− 1.5	96	21	34	24	54	6.05	+1.17	1.80	0	7	21	5	4		Norfolk & Western Ry.
Breading[a]	Mingo	507	0	69.6		93	1	44	24	43	5.45		2.15	0	9	16	5	8		Emory R. Noel.
Camden-on-Gauley	Webster	2,062	2								7.20		2.30	0	8	13	1	16	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	14	72.5	− 0.1	97	17	44	23	40	6.44	+1.92	2.73	0	7	8	0	22	w.	C. V. Lewis.
Clay	Clay	706	1																	Prof. E. H. Knabenshue.
Cuba ††	Jackson	650	15	68.5	− 0.5	98	1	38	23	41	2.03	−1.92	1.38	0	3	9	18	3	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	1								2.96		1.90	0	5					Lockmaster.
Dam 20 O. R.	Wood	551	1								1.72		0.78	0	6					Lockmaster.
Dam 22 O. R.	Jackson	538	2								3.24		1.72	0	6					U. S. Engineer Office.
Dam 26 O. R.	Mason	505	1								4.55		2.55	0	4					U. S. Engineer Office.
Elkhorn	McDowell	1,933	24																	J. J. Lincoln.
Evans	Jackson	606	5	70.0		90	1†	42	23	36	4.19		2.79	0	7	20	1	9		B. F. Sayre.
Gary	McDowell	1,426	1								6.46		2.47	0	9					U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	21	67.6[f]	− 0.8	92	1	38[f]	24	46[f]	5.87	+1.87	2.15	0	8	11	7	12	w.	W. H. Gwinn.
Hinton	..do	1,450	20	68.6	— 1.9	94	1	43	23†	39	4.77	+0.66	2.70	0	10	17	0	13	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	5	65.0		89	2†	37	24	46	6.39		1.80	0	12	14	6	10		R. C. Ferguson.
Huntington	Cabell	538	23	72.6	+ 0.1	96	1	47	23	37	4.96	−0.21	2.52	0	8	12	3	15	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	1								5.44		2.83	0	8					Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	17	65.8	− 1.6	87	1†	41	23†	37	7.41	+3.29	1.95	0	10	18	7	5	nw.	Geo. T. Argabate.
Logan	Logan	687	14																	Agent C. & O. Ry.
Madison	Boone	704	11																	S. E. Bradley.
Marlinton	Pocahontas	2,131	18	61.8	− 3.5	84	1	36	23	44	10.11	+5.30	3.53	0	14	3	19	8	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	24																	Miss Donna Tully.
Point Pleasant	Mason	553	24			96	1				4.91	+0.54	2.90	0	7	8	12	10	sw.	W. D. Holmes.
Powellton	Fayette	933	21	73.2	+ 2 5	95	1†	42	23	45	4.51	−0.24	2.60	0	10	13	6	11	nw.	S. C. Lampert.
Raleigh	Raleigh	2,130	1								4.94		2.24	0	7					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	1								5.80		2.50	0	7				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	17	70.0[a]	− 1.3	94[a]	5	42[a]	23	50[b]	3.86	+0.14	2.11	0	8	15[a]	4[a]	10[a]		E. C. Brace, Jr.
Ryan	Roane	709	14	71.2	+ 2.4	99	17	40	23	48	5.08	+0.71	1.87	0	7	17	7	6		Wm. E. Ryan.
Sissonville	Kanawha	625	1																	J. N. Johnson.
Spencer ††	Roane	784	13	69.1	0.0	93	1	40	16	50	6.50	+1.99	4.26	0	3	2	28	0		A. M. McKown.
Sutton	Braxton	839	11	70.3	− 2.6	95	21†	42	23	40	4.65	−1.14	1.16	0	9	21	8	1		C. B. Lakle.
Union	Monroe	2,250	13	67.8[h]	+ 1.2	93[b]	1	41[h]	23	43[e]	7.28	+3.18	2.40	0	8					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	7																	J. M. Ayres.
Williamson	Mingo	660	17	69.6	− 2.6	91	1	44	19	39	3.20	−1.64	1.80	0	4	8	16	6	w.	J. F. Keyser.
Averages and	extremes			68.8	− 0.9	99	17	34	24	54	5.17	+0.92	3.53	0	8	14	6	10	w.	
State averages and	extremes			68.2	− 1.0	99	17	34	24	54	4.17	−0.24	4.01	0	8	16	7	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[r] Approximated by the observer.

Daily Precipitation for June, 1918.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																															
Bayard	Potomac			T.			.56	.29				.15	.06					.12	1.10			.35	.29			.20	.12	.08		.38	.01		3.71
Brandywine	do		1.35	.05			.19	.37				.06						.84	T	.06		.07	.13			*	1.06			.85	.50		5.44
Burlington	do		T.				.10	1.02			.15		.10					.27				*	.27			*	.46		.13	.75	.30		3.55
Harpers Ferry ‖	do			.40				T.	.05														.94				.21	.10		.50		2.20
Martinsburg	do		.30				*	.26			.10		.13					.03				*	1.03			*	.25		.05	.78	.10		3.03
Moorefield	do			.02				.30										.70					.28		.04		.50			.65	.79		3.28
Piedmont	do						.28	1.33				.05	.22		T.			.41	T.			.13	.23	T.		.18	.25	.01		.03	.03		3.15
Romney	do						*	.85					.04					1.25				.12	.16			*	.26	*	1.51				4.19
Upper Tract	do			T.			.80												.60				.30			.80	.40	.10		1.20			4.20
Wardensville	do		.26				.08	.10										.27		.02		.33	.09			.20	.35			.35	.15		2.20
Northern Division.																															
Bens Run	Ohio						.37					.08						.54				.10	.41			.11				.46	.60		2.67
Brandonville ‖	Monongahela							1.22				.76	.11			T.		2.09	.32				.32				.06		.10				4.98
Buckhannon	do		T.				.20	.95										2.20					.60			.56	.30		.22	.55			5.58
Central Station	Middle Is. Creek																																
Cortland ‖	Monongahela							1.50										.80					.95	.19				.33		.42			4.19
Creston ‖	Little Kanawha			T.			T.	1.10				T.							.20				.23				1.13				.20		2.86
Davis ‖	Monongahela							1.45	.07					T.				.56		.12			.40	.20			.15			.30	T.		3.25
Elizabeth ‖	Little Kanawha								.49	.08									.10				.14				.80				.09		1.70
Elkins ***	Monongahela		.04				.26	.62		.03		.07		T.			.13	1.76	.01			.61	.52			.90			.12	.01	.24		5.32
Fairmont ‖	do			T.				.60	T.			.10	.13					.09	.32			.09	.49	T.		.04	T.			.05	T.		1.91
Glenville ‖	Little Kanawha			T.				.90										.56	.14				.20			T.	1.22			.18	.06		3.26
Grafton	Monongahela						T.	2.21				T.						1.10	.20			T.	.60						.08				4.19
Lost Creek	do						.06	.69				.24	T.					.45				.10	.35			.38	.15		T.	T.	T.		2.42
Mannington	do			T.			.24	.12				.06	T.					.14	.14			.17	.09			.09				.04			1.09
Morgantown	do						.25	.15			.38	.06						1.40	.12			.19	.28							.16			2.99
Moundsville ‖	Ohio	.40						.40				.50											.40		.20								1.90
New Cumberland	do	T					.24	.15					.21	T.	T.		.07					*	*			.20							0.87
New Martinsville	do						.42	.85					.05					.38				.08	.04			.14				.05	.04		2.05
Parkersburg ***	Ohio		T.				1.35	1.11			.01							.02				12			T.	.48				T.	.30		3.39
Parsons	Monongahela						T.					T.	2.00									T.	T.			T.	.86			T.			2.86
Philippi	do							1.78										1.20	.90			.33	.17			.15			.10	.62	.37		5.62
Pickens	do		.67				.49	.80										.65	1.02			.05	.60			.69			.18	.80			5.95
Rowlesburg ‖	do							2.18	.05			.08						3.01	1.00			.05	.50	.08			.08			.36	.75		8.24
Saint Marys ‖	Ohio	T.		T.				.85		T.		T.	.04									.05	.88	T.			.26						2.08
Smithfield ‖	Fishing Creek		.08					.65				.05						.35	.13			.26	.49	.03		.04	.13			.20	.48		2.80
Terra Alta	Monongahela							1.50				.28						.50	.70			.30	.20			.20					.70		4.38
Wellsburg	Ohio		.08				.41	.11			.50	T.		.02	T.			.19					.38			.07				T.			1.76
Weston	Monongahela						.05	1.40										.60	.30			.05	.90			.50	.45		.20	.25			4.70
Wheeling ‖	Ohio		.15	T.				.56				.81					.10						.01	T.		.17	T.				T.		1.80
Southern Division.																															
Bancroft ‖	Great Kanawha							1.48	.36														.59				1.87						4.30
Beckley	do																		.50							1.72	.70			.32	.62		3.86
Bluefield	do			.25				.62										1.45	.35			.50				1.80	1.08						6.05
Breading	do		1.15				.70	.58										.05				.15	.43			2.00	.15			.24			5.45
Camden-on-Gauley	do		.13				.22	1.20					.85					2.00				.20				2.30				.30			7.20
Charleston ‖	do			.20				.85	.25										1.11	T.			1.30			.25	2.48						6.44
Clay ‖	do																																
Cuba	Sand Creek			T.			.50						T.		T.			.15				T.	T.			1.38				T.			2.03
Dam 19 O. R. ‖	Ohio		T.				.31	1.90											.03				.14				.58						2.96
Dam 20 O. R. ‖	do						.35	.50				.02										.02	.05				.78						1.72
Dam 22 O. R. ‖	do						.17	.78	.05										.32			.20					1.72						3.24
Dam 26 O. R. ‖	do							1.00											.25				.75				2.55						4.55
Elkhorn	Big Sandy																																
Evans	Ohio		T.				.77	.15											.12			.06	.20			2.79					.10		4.19
Gary ‖	Big Sandy			.36	.02			.37	1.01										1.05			.09	1.07				2.47			.02			6.46
Green Sulpr. Spgs.	Great Kanawha						.40	.43										.57				.42				2.15	.37			.69	.84		5.87
Hinton ‖	do			T.				.15	.26									.12	1.10	.04		.10	.18				2.70			.04	.08		4.77
Holcomb	do		.09				*	53					.06					1.53	.10			.82				*	1.80		.88	.23	.35		6.39
Huntington ‖	Ohio			.14			.16	.84	.28			.08											.04			.58	1.94			T.			4.06
Kayford ‖	Great Kanawha			1.05			*	.57	.85										T.				.06	.04			2.83				.04		5.44
Lewisburg	do						.41	1.05										1.25	1.00			.26	.38			1.95	.46			.62	.03		7.41
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do		.20				.52	.15					.06		T.			2.37	1.16	.04		.62	.32			1.60	.95		.16	1.72	.24		10.11
Nuttallburg	do																																
Point Pleasant ‖	Ohio		.05				.12	1.44												.01			.35				2.90			.04			4.91
Powellton			*	.56			.28	.82										.12				.09				1.86	.74			.01	.03		4.51
Raleigh ‖	Great Kanawha						.51	T.									.50	.20			.12					2.24	.22				1.15		4.94
Renick ‖	do							.70										1.55			.10		.85			2.00	.50			.10			5.80
Robertsburg ‖	do						.10	1.10	.06										.10				.38		.06	2.05		.01					3.86
Ryan	do		.10				.89						T.					.11	.70			.50				1.87			T.	.91			5.08
Sissonville ‖	do																																
Spencer ‖	Little Kanawha			T.				.57	T.				T.						T.				1.67				4.26		T.				6.50
Sutton	Great Kanawha						.40	.85										.82	.32			.21	.01			1.16	.34				.54		4.65
Union ‖	do							.60									.75	.40	2.40			.15				2.30			.08		.60		7.28
White Sulphur Spgs.	do																																
Williamson ‖	Big Sandy			.60			T.	.40	T.										T				.40			T.	1.80						3.20

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for June, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	82	85	83	82	80	79	67	77	79	76	78	73	67	64	71	78	80	72	64	71	68	60	76	79	66	62	78	83	81	84	....	74.8
	Minimum	61	58	62	56	60	64	40	44	54	57	60	53	45	48	48	42	51	50	46	50	40	40	40	38	42	40	41	59	65	61	....	50.4
Brandywine	Maximum	92	89	80	81	85	79	78	76	83	85	85	83	75	75	79	85	84	74	75	74	65	70	67	79	66	62	75	82	86	84	....	78.4
	Minimum	59	59	62	52	53	56	63	41	42	48	57	58	54	48	46	41	58	61	56	46	53	54	41	35	55	58	58	54	63	64	....	53.2
Burlington	Maximum	91	90	82	83	87	78	75	75	81	84	85	85	73	72	78	83	84	73	77	75	64	71	68	80	65	63	76	84	85	82	....	78.3
	Minimum	58	64	60	49	55	58	63	45	44	45	60	60	57	54	46	42	61	63	53	44	52	53	51	35	54	54	58	52	65	64	....	54.0
Martinsburg§	Maximum	95	93	83	86	91	84	80	77	85	89	85	89	77	72	81	88	90	70	86	81	67	68	70	82	82	64	81	84	90	86	....	81.9
	Minimum	65	70	67	54	56	63	65	52	49	51	51	64	58	57	51	48	53	66	52	55	52	58	51	45	47	59	59	58	59	67	....	56.7
Moorfield	Maximum	98	94	84	87	92	85	79	79	87	89	90	90	82	82	82	91	88	81	81	80	77	63	70	83	80	63	80	87	89	88	....	83.5
	Minimum	64	63	63	65	57	59	67	44	46	57	58	62	56	51	47	43	61	62	56	79	58	56	46	38	57	56	40	56	66	64	....	56.2
Piedmont	Maximum	90	89	82	84	89	87	76	77	84	85	84	82	72	74	89	82	83	78	77	75	74	65	68	80	77	62	76	84	90	83	....	79.9
	Minimum	64	63	60	49	55	58	65	46	47	51	60	60	55	49	46	45	60	65	52	45	56	51	49	38	55	58	58	58	65	64	....	54.9
Romney	Maximum	97	95	89	90	95	87	85	79	83	90	90	87	76	78	82	85	90	87	80	81	79	69	71	85	84	85	86	88	93	86	....	85.1
	Minimum	63	65	65	50	61	59	66	44	47	44	60	61	55	53	43	41	60	65	45	43	57	55	50	37	42	44	49	54	66	64	....	54.6
Upper Tract	Maximum	92	90	88	87	....	84	82	81	84	86	87	86	85	85	81	82	....	89	81	81	....	75	68	82	81	75	80	85	89	84	....	83.3
	Minimum	60	60	60	61	....	48	40	40	45	47	48	49	55	54	47	46	....	42	42	45	....	48	44	38	39	53	50	54	64	61	....	49.6
Wardensville	Maximum	79	91	86	83	89	80	77	76	83	87	83	87	75	75	88	85	85	78	78	75	72	69	67	80	70	62	77	81	90	87	....	79.8
	Minimum	64	62	60	49	56	58	61	41	44	50	58	57	55	49	45	41	62	60	55	42	57	56	52	35	55	57	51	53	61	60	....	53.5
Northern Division.																																	
Bens Run	Maximum	91	82	85	89	91	75	76	72	82	84	84	81	76	74	80	76	90	84	81	83	78	74	74	84	69	78	86	86	89	91	....	81.2
	Minimum	66	68	61	57	61	67	59	49	49	55	62	59	52	55	52	50	64	63	61	55	62	04	45	47	59	62	59	55	65	65	....	57.9
Buckhannon	Maximum	90	88	79	85	82	81	75	80	80	83	85	82	72	70	75	84	86	84	77	81	69	66	66	77	67	75	82	85	88	85	....	79.3
	Minimum	65	65	63	52	62	61	64	45	50	50	53	62	52	44	45	45	60	64	68	52	58	54	43	40	55	58	56	55	65	64	....	55.7
Creston	Maximum	92	84	85	90	90	76	78	79	83	85	88	83	78	70	83	85	90	84	85	83	74	69	77	84	72	75	86	86	88	85	....	82.2
	Minimum	67	66	62	55	60	65	69	46	47	52	44	69	53	55	52	52	65	65	55	55	66	57	42	43	62	60	60	61	65	64	....	57.8
Elkins	Maximum	86	84	76	81	86	76	69	73	78	80	80	78	66	71	73	83	83	75	75	76	69	64	62	75	62	67	77	83	84	80	....	75.7
	Minimum	62	61	53	48	52	59	50	41	45	46	55	52	50	51	47	40	58	60	52	48	55	46	42	38	54	59	54	59	64	62	....	52.1
Fairmont§	Maximum	93	89	86	90	92	87	79	80	86	87	87	82	77	76	82	90	91	80	83	87	75	66	72	82	70	77	89	88	91	90	....	83.5
	Minimum	67	67	61	54	55	61	67	46	45	52	55	61	51	54	50	48	58	65	56	52	58	61	45	40	46	61	59	59	65	66	....	56.2
Glenville	Maximum	95	95	90	92	94	94	81	80	84	88	88	89	84	77	83	90	94	93	84	87	85	73	70	86	87	80	90	90	92	87	....	86.7
	Minimum	68	65	62	55	58	64	68	44	47	50	60	67	48	50	52	45	63	64	51	50	60	56	42	45	60	60	57	58	65	64	....	56.6
Grafton	Maximum	92	89	82	89	92	87	76	76	85	86	86	83	74	76	80	90	88	85	81	81	75	73	70	83	80	73	86	89	90	87	....	82.8
	Minimum	66	65	61	51	56	62	66	45	45	50	60	67	52	53	49	43	61	63	52	51	58	53	44	39	55	60	59	57	65	64	....	55.7
Lost Creek	Maximum	88	90	81	87	90	78	77	76	79	84	84	81	80	82	84	87	89	83	77	78	80	65	68	76	69	74	85	86	87	86	....	81.1
	Minimum	62	63	59	49	54	62	60	42	41	45	57	57	41	45	48	50	61	64	52	54	51	53	40	57	58	56	56	59	58	....	....	53.7
Mannington	Maximum	88	86	79	84	85	81	74	74	79	81	81	80	72	75	76	84	85	85	77	80	77	68	68	78	76	73	81	83	87	86	....	79.4
	Minimum	65	64	57	50	54	62	67	42	42	49	58	70	50	51	45	43	62	63	59	48	56	53	42	35	56	59	56	57	63	63	....	54.4
Morgantown	Maximum	89	88	81	86	89	86	74	74	84	82	79	79	72	72	76	86	86	85	78	78	75	66	69	80	77	68	84	86	90	86	....	80.2
	Minimum	....	....	....	....	58	67	62	44	58	60	66	65	49	60	47	53	....	60	....	53	65	60	....	40	....	69	61	63	66	65	....	58.3
New Cumberland	Maximum	89	83	82	82	90	76	73	74	80	81	81	76	73	74	74	83	....	79	75	74	72	70	69	80	74	72	80	86	89	86	....	78.5
	Minimum	71	66	56	56	53	61	60	41	45	58	52	57	49	56	43	47	....	57	49	48	60	50	44	38	58	58	57	64	65	62	....	54.5
New Martinsville	Maximum	91	90	87	88	91	87	88	78	85	84	84	80	77	76	83	88	92	85	83	84	80	73	75	89	82	79	86	88	88	88	....	84.3
	Minimum	69	67	72	55	58	66	66	47	47	52	61	68	51	53	49	49	63	62	57	54	61	55	44	41	60	62	57	63	65	65	....	58.0
Parkersburg	Maximum	92	81	82	88	89	78	74	76	82	84	85	79	75	73	78	87	89	82	80	81	75	69	72	83	70	75	82	84	88	83	....	80.5
	Minimum	73	67	62	56	63	66	61	51	50	54	62	59	54	58	56	52	69	63	58	58	66	48	45	47	61	63	62	67	68	65	....	59.5
Parsons	Maximum	91	90	84	83	87	75	78	79	81	81	81	80	75	78	89	86	86	77	82	79	78	62	64	76	63	76	87	86	84	86	....	79.8
	Minimum	64	60	50	47	47	53	59	47	40	43	57	58	46	44	43	38	58	63	52	55	45	53	41	37	49	58	53	54	60	52	....	50.9
Philippi	Maximum	89	90	80	85	86	90	73	79	75	83	76	74	74	72	75	81	90	85	78	83	82	73	64	80	78	67	75	77	82	85	....	79.4
	Minimum	66	61	62	50	57	66	50	48	44	45	59	60	50	59	42	58	59	60	52	60	60	52	50	41	50	60	59	53	63	62	....	55.3
Pickens	Maximum	86	83	75	81	83	74	70	71	80	81	82	80	73	74	75	....	....	76	78	76	71	63	65	76	62	71	72	82	81	80	....	75.8
	Minimum	62	59	55	48	49	64	54	38	43	44	52	52	47	45	43	44	57	58	55	52	53	47	35	38	53	55	53	56	55	59	....	50.8
Terra Alta	Maximum	80	82	74	70	81	71	69	69	74	76	75	73	64	65	66	78	75	70	71	69	67	62	59	69	68	61	72	75	74	79	....	71.3
	Minimum	62	62	54	51	52	59	59	41	42	48	54	60	46	52	39	47	55	54	51	47	52	44	40	35	53	54	54	54	62	60	....	51.4
Wellsburg	Maximum	90	82	83	87	90	85	74	77	85	82	82	81	73	74	79	86	89	82	82	84	76	70	71	83	75	74	85	88	91	88	....	81.7
	Minimum	66	66	55	51	54	61	59	42	41	53	54	64	50	54	43	44	62	55	47	45	56	56	45	35	59	55	53	59	60	63	....	53.6
Weston	Maximum	90	88	80	86	88	87	86	75	81	82	83	82	78	73	78	86	88	86	79	81	77	68	68	78	78	76	84	85	87	84	....	81.4
	Minimum	67	65	62	53	57	58	52	45	46	51	59	71	52	52	49	45	61	64	57	53	53	53	42	42	60	58	57	60	65	64	....	55.8
Wheeling§	Maximum	97	87	82	93	96	74	80	87	89	90	86	84	80	80	85	92	95	88	85	88	76	60	78	89	72	89	80	92	92	90	....	85.2
	Minimum	67	67	59	55	57	59	65	44	46	47	57	65	50	54	46	47	63	62	58	53	55	59	44	41	43	60	59	57	60	65	....	55.3
Southern Division.																																	
Beckley	Maximum	87	88	80	83	85	80	78	77	78	80	83	82	72	78	78	80	85	78	77	72	75	70	70	78	71	77	82	84	78	80	....	78.9
	Minimum	62	65	52	54	52	59	45	46	45	48	60	49	46	55	48	49	59	65	52	56	52	60	40	40	48	59	50	56	63	62	....	52.6
Bluefield	Maximum	90	89	82	86	86	82	75	72	70	84	80	85	88	90	91	89	90	88	90	88	96	90	89	88	88	88	88	89	88	89	....	86.3
	Minimum	59	64	53	44	49	58	54	50	51	37	38	47	42	38	44	43	46	54	54	49	46	52	51	34	48	48	48	51	50	50	....	48.4
Charleston	Maximum	96	90	84	90	93	85	80	90	90	92	90	89	80	85	88	96	97	85	86	88	75	71	77	83	77	78	90	89	89	92	....	86.5
	Minimum	76	64	62	57	59	60	69	50	57	56	59	61	55	53	49	57	60	65	60	59	60	60	44	45	59	59	62	69	62	64	....	58.5
Elkhorn	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Green Sulphur Spgs.	Maximum	92	89	78	85	87	88	76	79	85	88	89	77	79	87	89	90	90	83	75	77	78	78	80	82	78	82	86	89	88	89	....	83.8
	Minimum	60	51	62	55	51	61	64	41	42	52	51	43	45	45	44	41	57	66	52	54	54	50	42	38	....	....	....	....	....	....	....	51.4
Hinton§	Maximum	94	92	79	86	89	80	76	77	84	86	89	86	73	80	83	89	90	81	76	76	67	72	72	82	61	72	88	86	88	84	....	81.1
	Minimum	64	65	67	60	59	58	65	47	48	47	55	57	54	51	52	50	51	61	66	58	58	57	43	43	48	58	57	53	59	66	....	56.1
Holcomb§	Maximum	88	89	78	86	89	77	74	78	83	83	84	80	71	72	76	88	87	78	79	76	71	65	68	80	64	75	78	86	85	83	....	79.0
	Minimum	58	59	58	48	50	55	52	42	40	41	49	54	50	43	48	42	59	62	56	53	55	55	50	37	45	57	51	56	60	54	....	51.0
Huntington§	Maximum	96	84	88	93	89	83	80	82	88	87	90	87	80	86	87	89	93	87	84	80	72	72	80	82	65	74	91	99	88	89	....	84.5
	Minimum	70	68	65	60	61	66	70	51	54	57	59	62	58	59	61	52	58	66	61	59	62	62	47	50	54	60	62	68	67	68	....	60.6
Lewisburg	Maximum	87	87	77	82	85	78	74	74	80	81	82	81	70	73	78	83	82	81	72	73	66	67	66	76	69	71	73	84	83	79	....	77.1
	Minimum	60	61	64	50	51	59	62	44	43	49	53	59	49	46	56	46	58	63	61	55	52	54	41	41	57	57	59	56	64	64	....	54.5
Marlinton	Maximum	84	80	74	78	80	72	70	68	76	78	78	76	70	68	74	82	80	78	66	68	58	60	62	72	62	66	66	76	74	74	....	72.3
	Minimum	62	58	58	48	58	62	56	40	42	48	50	50	50	42	46	38	51	60	56	50	50	50	36	38	50	51	56	54	62	60	....	51.3
Point Pleasant	Maximum	96	90	87	91	92	85	78	78	84	88	88	85	81	81	82	91	95	93	88	85	80	72	77	85	83	81	87	86	91	91	....	85.6
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Powellton	Maximum	95	95	83	93	93	85	87	80	86	87	89	89	85	80	85	94	93	93	83	81	80	76	76	86	85	80	82	90	90	88	....	86.5
	Minimum	73	65	65	58	57	67	67	47	67	50	57	64	55	57	56	49	62	68	61	58	63	64	42	45	60	61	59	61	66	66	....	59.8
Robertsburg§	Maximum	93	91	92	92	94	79	71	79	89	87	88	82	76	80	87	90	93	93	87	84	75	65	....	85	65	75	89	86	88	86	....	84.2
	Minimum	67	65	62	60	44	61	67	47	48	52	50	55	55	50	54	47	48	48	57	54	62	60	42	....	45	60	63	66	63	65	....	55.8
Ryan	Maximum	93	92	89	93	93	84	85	81	82	84	86	87	90	80	83	92	99	85	90	88	75	75	75	85	71	88	89	85	95	91	....	86.3
	Minimum	64	61	61	51	56	66	55	43	43	48	58	63	52	51	49	41	64	66	64	56	65	55	40	42	60	60	58	60	61	63	....	56.1
Spencer§	Maximum	93	87	86	88	90	79	76	76	84	85	86	84	74	80	80	90	92	83	82	82	80	80	81	72	67	75	80	84	90	85	....	82.4
	Minimum	67	67	62	63	54	59	69	46	46	48	52	59	53	54	50	40	53	65	53	55	67	59	42	44	45	60	60	60	61	61	....	55.8
Sutton	Maximum	92	89	85	88	91	91	81	78	86	86	88	88	79	80	80	84	86	86	80	88	95	95	72	76	76	78	86	87	86	85	....	84.9
	Minimum	65	67	69	56	57	64	56	45	47	56	57	61	52	56	55	44	46	56	58	57	58	56	42	44	54	58	57	56	64	59	....	55.7
Union§	Maximum	93	78	....	86	....	82	....	....	....	89	85	88	78	....	87	92	87	80	79	79	68	....	79	78	62	....	82	82	86	83	....	....	81.8
	Minimum	....	62	51	....	59	....	43	....	....	....	45	49	51	45	....	49	58	62	58	56	52	60	....	41	55	55	....	55	62	60	55	....	53.8
White Sulphur Spgs.	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Williamson§	Maximum	91	90	80	87	89	79	78	75	82	84	85	86	73	78	84	89	90	73	83	75	68	70	70	80	68	70	85	84	84	86	....	80.4
	Minimum	69	69	67	61	62	62	70	54	50	55	60	62	55	52	53	55	55	69	44	61	61	60	50	51	50	50	61	63	64	68	....	58.8

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JULY, 1918

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
AUGUST 26, 1918

Departure of the Mean Temperature from the Normal, July, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVI. PARKERSBURG, W. VA., JULY, 1918. No. 7

GENERAL SUMMARY.

The past month, with an average temperature of 70.3°, was the coolest July since 1891. On two or three mornings the temperatures were near the frost line in many of the more elevated sections and the July low temperature records for the State were nearly equaled or broken on the morning of the 9th. The rainfall also averaged much below the normal and was unfavorably distributed over the State and throughout the month. Drought conditions were severe over the western and most of the northern counties, causing much damage to crops. As the result of the lack of moisture, there was less than one-third a crop of potatoes in those counties. At the close of the month corn was also short and patchy, owing to continued cool weather and poor seed. The wheat yield was reduced one-third by the unfavorable conditions. Pastures were short, except in the southeastern counties. Oats were good and apples fair, but peaches were scarce. The wheat crop was secured under excellent conditions.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.05 and 30.04 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.26 inches on the 4th, and 29.81 inches on the 18th. Elkins, 30.22 inches on the 4th, and 29.79 inches on the 18th.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 70.3°. The departure from the normal for 39 stations having ten or more years of record was —3.1°. The month opened cool and the temperature was also below the normal from the 6th to the 21st and after the 29th, the lowest readings occurring generally on the 9th. Seasonally warm weather prevailed from the 3d to the 6th and 21st to the 29th, with the highest temperatures occurring generally on the 23d, 27th, and 28th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 80 per cent; 8 p. m., 61 per cent. The July averages for the same hours for the past 30 years are 80 and 68 per cent, respectively. Elkins, 8 a. m., 87 per cent; 8 p. m., 75 per cent. The July averages for Elkins for the same hours for the past 18 years are 87 and 78 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 62 stations reporting, was 3.18 inches. The departure from the normal for 43 stations having ten or more years of record was —1.19 inches. The rainfall was heaviest over the southeastern counties and lightest over the western counties. Showers fell in most sections on the 1st, 8th, 11-12th, 17th, 19th, 24-25th, and 29-30th, and in the northern counties on the 5-6th. The amounts received were moderate on the 12th, 17th, 25th, and 30th, but generally light on the other dates.

HAIL.

Light hail was reported from sections of the following counties: Lewis, on the 4th; Taylor, on the 5th; Pleasants, on the 11th; and Wetzel, on the 3d and 29th. No damaging storms were reported.

WIND.

The average wind velocity at Parkersburg was 4.3 miles per hour, or 0.2 mile below the July average for the past 28 years. The average at Elkins was 3.6 miles per hour, or 0.6 mile above the July average for 19 years. The highest velocity at Parkersburg was 30 miles per hour from the northwest on the 25th, and at Elkins 21 miles per hour from the west on the 1st.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 61 per cent of the possible amount, or normal as compared with the July average for 21 years. The average at Elkins was 45 per cent, or 9 per cent below the July average for 18 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 2d, 5th, 9th, 11th, 13th, 14th, 15th, 16th, 18th, 19th, 20th, and 27th; Charleston, 18th; Creston, 4th, 5th, and 20th; Elkins, 3d, 5th, 7th, 8th, 9th, 13th, 14th, 15th, 16th, 18th, 20th, 21st, 22d, 25th, 27th, and 28th; Fairmont, 8th and 20th; Grafton, 6th, 7th, and 9th; Hinton, 9th, 11th, 14th, 15th, 16th, 20th, and 25th; Dam No. 26 (Hogsett, W. Va.), 2d, 9th, 16th, 18th, 19th, and 20th; Holcomb, 12th, 13th, and 19th; Huntington, 18th; Mannington, 4th, 6th, 8th, 13th, 18th, 20th, 25th, and 27th; Marlinton, 3d, 4th, 5th, 6th, 9th, 11th, 14th, 15th, 16th, 20th, 21st, 22d, 23d, 24th, 26th, 27th, and 28th; New Cumberland, 4th, 8th, 9th, 11th, 15th, 16th, and 21st; Parkersburg, 20th; Pickens, 17th and 31st; Romney, 20th, 26th, 27th, and 28th; Point Pleasant, 19th; Rowlesburg, 3d, 4th, 5th, 6th, 7th, 10th, 13th, 14th, 15th, 16th, 18th, 20th, 21st, 22d, 25th, 27th, and 28th; Smithfield, 22d, 23d, 24th, and 25th; St. Marys, 2d, 4th, 5th, 8th, 18th, and 20th; Wheeling, 14th, 15th, 18th, 19th, 20th, and 25th; Williamson, 2d, 5th, 13th, 15th, 16th, 21st, and 26th.

Hail: Bens Run, 11th; Grafton, 5th; Weston, 4th; Smithfield, 3d and 29th.

Halo, lunar: White Sulphur Springs, 21st.

Thunderstorms (dates and number of stations reporting): 1st, 2; 3d, 3; 4th, 3; 5th, 4; 6th, 1; 10th, 7; 11th, 10; 12th, 9; 13th, 3; 14th, 1; 16th, 1; 17th, 3; 18th, 5; 19th, 2; 20th, 1; 22d, 1; 23d, 6; 24th, 9; 25th, 13; 27th, 3; 28th, 1; 29th, 4; 30th, 5.

COMPARATIVE DATA FOR JULY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	67.5	..	....	5.59	....	....	....	..	..	..
1892	73.4	98	41	4.20	....	....	....	..	..	..
1893	73.8	98	42	2.96	5.95	1.37	....	20	10	1
1894	73.3	100	36	2.21	4.84	0.50	....	10	19	2
1895	70.5	99	39	4.35	7.04	1.65	....	11	13	7
1896	73.3	97	46	9.07	15.70	2.91	....	9	12	10
1897	74.2	102	46	5.43	9.92	2.85	....	11	12	8
1898	75.0	103	40	4.46	8.33	1.53	....	12	7	12
1899	73.3	100	33	3.78	7.92	0.20	....	14	10	7
1900	74.7	104	41	4.38	7.88	1.72	....	15	11	5
1901	77.4	104	47	3.15	6.21	0.69	....	14	12	5
1902	74.2	104	45	3.54	8.42	0.96	....	14	12	5
1903	72.5	100	37	3.74	8.30	1.82	....	16	10	5
1904	71.5	97	42	3.28	6.00	1.04	....	14	12	5
1905	73.3	98	43	5.92	10.64	3.00	....	12	11	8
1906	72.4	98	45	4.54	7.40	1.50	....	12	14	5
1907	72.7	98	42	6.66	13.36	1.99	....	12	14	5
1908	74.0	100	41	5.21	9.43	2.08	....	14	13	4
1909	70.2	96	36	4.17	10.50	0.60	....	14	11	6
1910	73.8	98	41	4.92	13.16	0.54	....	13	12	6
1911	73.3	106	40	2.82	6.94	0.40	....	16	12	3
1912	72.0	100	45	7.48	15.22	2.67	....	12	12	7
1913	74.2	103	40	5.80	10.07	2.14	....	15	12	4
1914	73.1	106	38	4.11	7.74	0.98	....	16	10	5
1915	71.9	99	38	4.63	11.31	1.82	....	12	11	8
1916	74.8	102	42	3.49	9.47	1.06	....	16	8	7
1917	72.6	104	44	4.83	8.27	1.25	....	14	10	7
1918	70.3	101	38	3.18	6.90	1.04	....	17	7	7
Means and extremes ..	73.0	106	33	4.57	15.70	0.20	....	14	11	6

Climatological Data for July, 1918.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard††	Grant	2,700	17	63.2	− 4.7	84	28	42	15	29	4.73	−0.18	1.73	0	15	9	12	10	w.	G. C. Dixon.
Brandywine	Pendleton		2	67.7		87	29	41	9	38	4.20		1.00	0	8	17	6	8	n.	Elmer Keister.
Burlington	Mineral	875	24	69.3	− 3.5	92	27	44	3	38	2.23	−1.38	0.60	0	5	12	16	3	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	29								2.96	−0.37	0.95	0	9					S. W. Lightner.
Martinsburg	Berkeley	435	26	73.0	− 2.6	96	21†	50	10	35	2.41	−1.54	1.12	0	10	20	8	3	s.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	22	72.2[b]	− 1.7	94[b]	23	45[b]	9	41[b]	3.62	+0.15	2.20	0	8	28[c]	0[c]	0[c]		M. S. Henkel.
Piedmont	Mineral	919	5	69.8		93	23	44	9	36	2.92		0.82	0	14	14	6	11	nw.	C. A. Suter, Jr.
Romney[h]	Hampshire	824	20	72.1	− 3.1	94	21†	45	9	39	3.48	−0.04		0		10	7	6		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	19	67.3[a]	− 5.1	89[a]	23	41[a]	9	41	3.45	−0.25	1.00	0	7	20	6	5	w.	J. M. Mallow.
Wardensville	Hardy	1,200	0	70.6		93	23	43	3	39	3.28		0.92	0	9	21	9	1	w.	Luther F. Sutton.
Averages and	extremes			70.2	− 3.2	96	21†	41	9	41	3.17	−0.57	2.20	0	9	18	8	5	w.	
Northern Division.																				
Bens Run	Pleasants	622	16	72.4	− 2.9	95	27	46	9	34	1.69	−2.92	0.95	0	5	23	5	3		J. D. Riggs.
Brandonville††	Preston	1,809	7								6.75		3.20	0	7					W. H. Miller.
Buckhannon	Upshur	1,411	21	69.7	− 2.7	90	28	45	9	35	2.55	−2.75	0.80	0	7	21	5	5		H. A. Darnall.
Cortland	Tucker	3,300	2								2.96		1.19	0	7					Samuel Harmon.
Creston	Wirt	701	16	72.0	− 2.8	95	27	45	9	36	3.84	+0.04	1.05	0	9	19	4	8	sw.	J. M. Reed.
Davis	Tucker	3,093	9								1.19		0.38	0	7	14	11	6	sw.	Ross C. Male.
Elizabeth	Wirt	646	6								2.24		0.69	0	5					E. D. Ball.
Elkins	Randolph	1,947	17	66.6	− 4.0	87	21	41	9	35	1.68	−2.96	0.41	0	14	5	14	12	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	12	71.8	− 2.7	98	27	43	9	39	3.59	−1.24	1.34	0	13	25	3	3	w.	F. P. Hall.
Glenville	Gilmer	738	24	73.5	− 1.5	97	22†	45	9	42	3.58	−1.89	0.70	0	8	16	14	1	w.	Howard R. Brannon.
Grafton	Taylor	1,000	25	71.1	− 1.8	94	21†	43	9	38	6.90	+1.97	2.35	0	11	15	9	7	e.	W. C. Byers.
Lost Creek	Harrison	1,026	20	69.5	− 3.0	93	21†	40	9	40	4.14	−0.58	1.76	0	9	15	12	4	sw.	Allen Smith.
Mannington	Marion	974	15	69.4	− 3.2	91	21†	39	9	38	3.63	−1.02	2.21	0	12	16	8	7	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	25	70.9	− 2.7	92	24†	46	9	34	4.07	−1.08	1.67	0	8	13	2	16	sw.	R. W. Muldoon.
Moundsville	Marshall	642	15	70.8[a]	− 3.7	97[a]	20	43	9	43	2.75	−1.77	1.30	0	6	19	8	4	sw.	M. Z. White.
New Cumberland	Hancock	987	20	69.8	− 3.2	96	21	43	8†	43	1.88	−2.61	0.68	0	6	18	11	2	sw.	M. F. Smith.
New Martinsville	Wetzel	634	24	73.0	− 2.6	98	28	44	9	39	1.67	−3.16	0.55	0	4	27	1	3	s.	Wm. Ankrom.
Parkersburg	Wood	638	31	72.6	− 3.0	94	5	48	9	33	1.28	−3.38	0.41	0	10	15	10	6	n.	U. S. Weather Bureau.
Parsons ††	Tucker	1,656	18	67.6	− 2.8	94	28	43	1†	39	1.81	−3.39	0.75	0	4	16	11	4		J. W. Swisher.
Philippi ††	Barbour	1,149	21	66.1	− 6.8	91	27	45	10	35	3.06	−1.97	1.40	0	8	13	10	8	w.	Attic G. Robinson.
Pickens	Randolph	2,697	15	65.0	− 3.8	87	24	39	9	35	5.24	−1.03	1.60	0	11	21	2	8	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	31								5.30	+0.50	1.23	0	14				w.	J. F. Pierce.
Saint Marys	Pleasants	577	9								2.92	−1.04	0.80	0	7				w.	Wm. Hughes.
Smithfield	Wetzel	835	12	69.8	− 2.6	94	27†	42	9	39	2.53	−2.84	0.60	0	12	23	5	3	sw.	G. M. Whisler.
Terra Alta	Preston	2,612	17	64.2	− 5.4	85	22	43	9	31	4.18	−1.56	2.10	0	7	20	10	1	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	17	70.8	− 1.1	97	21	39	9	47	3.16	−1.42	1.55	0	7	21	8	2	w.	George P. Pister.
Weston	Lewis	1,026	22	71.0	− 3.7	92	21†	45	9	36	3.18	−1.90	1.29	0	8	7	21	3		Weston State Hospital.
Wheeling	Ohio	645	31	72.5	− 1.7	101	28	43	9	50	1.52	−3.06	1.18	0	7	14	10	7	sw.	Miss M. B. Forsyth.
Averages and	extremes			70.3	− 2.9	101	28	39	9	50	3.11	−1.62	2.35	0	9	18	8	5	sw.	
Southern Division.																				
Bancroft	Putnam	574	13	70.6	− 5.0	92	5	49	9	38	1.76	−2.59	0.65	0	5	23	2	6	nw.	R. E. Dent.
Beckley	Raleigh	2,440	17	67.9	− 3.6	87	20	45	2†	38	3.69	−0.46	1.31	0	6	20	4	7	w.	John A. Ewart.
Bluefield	Mercer	2,558	22	66.4	− 5.5	90	1	38	3	50	2.23	−2.26	0.78	0	5	23	7	1		Norfolk & Western Ry.
Breading[h]	Mingo	507	0	70.4		93	28	48	3	37	1.04		0.31	0		16	6	1		Emory R. Noel.
Camden-on-Gauley	Webster	2,062	2								3.10		0.92	0	7	15	2	14	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	14	74.6	− 1.9	97	23	51	9	36	2.23	−1.90	0.90	0	7	11	2	18	w.	C. V. Lewis.
Clay††	Clay	706	1								5.82		2.16	0	9					Prof. E. H. Knabenshue.
Cuba ††	Jackson	650	15	71.0	− 2.5	93	3	40	2	48	4.19	+0.06	1.52	0	8	10	20	1	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	1								1.71		0.47	0	6					Lockmaster.
Dam 20 O. R.	Wood	551	1								1.36		0.58	0	5					Lockmaster.
Dam 22 O. R.	Jackson	538	2								2.73		0.70	0	8					U. S. Engineer Office.
Dam 26 O. R.	Mason	505	1								1.45		0.72	0	4					U. S. Engineer Office.
Elkhorn	McDowell	1,933	24																	J. J. Lincoln.
Evans	Jackson	606	5	72.0		91	27	49	9	30	1.24		0.54	0	4	8	8	15		B. F. Sayre.
Gary	McDowell	1,426	1								4.10		1.14	0	11					U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	21																	W. H. Gwinn.
Hinton	do	1,450	20	70.8	− 3.7	92	27	50	3†	38	5.38	+1.67	1.28	0	14	9	2	20	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	5	65.6		88	23†	42	2†	40	4.65		1.40	0	9	16	9	6		R. C. Ferguson.
Huntington	Cabell	538	23	73.6	− 3.1	95	28	52	2	35	2.76	−1.61	1.08	0	7	17	1	13		L. H. Hutchinson.
Kayford	Kanawha	1,335	1								4.19		1.36	0	12					Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	17	67.4	− 3.9	86	25	41	9	35	4.42	+0.59	1.58	0	11	17	6	8	nw.	Geo. T. Argabate.
Logan	Logan	687	14																	Agent C. & O. Ry.
Madison	Boone	704	11																	S. E. Bradley.
Marlinton	Pocahontas	2,131	18	64.0	− 4.8	84	23	40	3†	36	4.62	−0.47	1.10	0	16	3	18	10	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	24																	Miss Donna Tully.
Point Pleasant	Mason	553	24			95	27				2.99	−1.01	1.35	0	7	8	13	10	sw.	W. D. Holmes.
Powellton	Fayette	933	21	73.0	− 1.3	93	5†	47	9	37	4.95	+0.50	1.65	0	15	12	10	9	nw.	C. M. Dechant.
Raleigh	Raleigh	2,130	1								3.03		0.90	0	10					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	1								4.32		1.30	0	7				se.	Wm. B. Hill.
Robertsburg	Putnam	574	17	71.9	− 3.8	97	28	49	2†	37	2.20	−1.67	0.90	0	4	19	3	9		E. C. Brace, Jr.
Ryan	Roane	700	14	73.4	0	96	23†	42	9	44	2.13	−2.67	0.72	0	10	17	11	3		Wm. E. Ryan.
Sissonville	Kanawha	625	1																	J. N. Johnson.
Spencer ††	Roane	784	13	71.4	− 2.4	92	25†	45	9	37	1.41	−3.04	0.48	0	5	6	24	1		A. M. McKown.
Sutton	Braxton	839	11	71.0	− 5.8	92	4†	47	3†	36	5.26	+0.38	3.86	0	6	25	5	1		C. B. Eakle.
Union	Monroe	2,250	13	70.0[d]	− 0.9	92[d]	18	42[c]	8	39[c]	6.00	+1.47	1.70	0	6					J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	7	69.0		89	23	42	3†	42	4.80		1.30	0	7	24	2	5		J. M. Ayres.
Williamson	Mingo	660	17	71.4	− 4.6	90	23†	54	3†	32	2.50	−2.10	.80	0	5	4	14	13	w.	J. F. Keyser.
Averages and	extremes			70.2	− 3.4	97	23†	38	3	50	3.24	−0.81	3.86	0	8	15	7	9	w.	
State averages and	extremes			70.3	− 3.1	101	28	38	3	50	3.18	−1.19	3.86	0	8	17	7	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

z Approximated by the observer.

Daily Precipitation for July, 1918.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac	.38				.18	.08	.10	.12		T.	.88	.12	.20	.12					.39					.13	1.60				.01	.30	.12	4.73
Brandywine	do						T.				T.		.60	.10				.20	T	1.00				.40	1.00	.40					.50	4.20
Burlington	do					.60						T.	.50					T.						.28	T.	.19				.66		2.23
Harpers Ferry ‖‖	do	.20				.39								.95		.10		.26	.05		.50					.21					.30	2.96
Martinsburg	do					.05						.05	*	.25	.07		*	.55						T.	*	1.12				.32		2.41
Moorefield	do						.18						1.82	.38			.02	.36	.16	.20										.50		3.62
Piedmont	do				.08	.32	.04				.01	.04	.82	.15	.06			.04		.19					.19	.53				.02	.43		2.92
Romney	do	*	*	*	*	*	*	*	*			T.	2.00	T.			T.							.33	.22	.20				.73		3.48
Upper Tract	do						.50							.10			.15	.20		1.00				T.	T.	.70				.80	T.	3.45
Wardensville	do										.25		.42	.22			.48	.16		.16					.27	.40				.92		3.28
Northern Division.																																	
Bens Run	Ohio					.10						.12	.95												.38					.14			1.69
Brandonville ‖‖	Monongahela					1.09					*	.21								.45						3.20	.70		T.	1.10		6.75
Buckhannon	do					T.	.80	T.			T.	.20	.15	T.				.25		.15				T.	T.	.34				.66	T.	2.55
Central Station	Middle Is. Creek																																
Portland ‖‖	Monongahela	.26					.41		.10					.22					.42	.36											1.19		2.96
Preston ‖‖	Little Kanawha	1.05									T.	.65	.60	.12				.38							.04	.41				.49	.40	3.84
Davis ‖‖	Monongahela				T.		.18		.08				T.		.05	.17		.10		T.					.38						.23	1.19
Elizabeth ‖‖	Little Kanawha	.52											.63					.36								.69				.04		2.24
Elkins ***	Monongahela			T.		.05	T.	.04			.01	.23	.01	.25	T.			.21	.25	.07					.03	.08	T.			.01	.39	.05	1.68
Fairmont ‖‖	do	.15					.52		.09			T.	.35	.14				.05	T.	.10	.09				.11	.05	.60				.96	.38	3.59
Glenville ‖‖	Little Kanawha	.56										.22	T.					.40						.10	.60		.70				.36	.64	3.58
Grafton	Monongahela	.40				1.45		*	.05				*	*				.11		.83						1.71			.10	2.25			6.90
Lost Creek	do	.25		T.	.06	.11		T.			.10	T.	.69	T.				.52						.05	.60		T.			1.76			4.14
Mannington	do	.37				.15		.08	.01		.11		.06				T.	.06		.41				T.	.03	.09	.05			2.21			3.63
Morgantown	do	.16			.08	.17	T.	T.			T.	.29	.07	T.				T.								1.58	.05			1.67			4.07
Moundsville ‖‖	Ohio	.60										.25	.05													1.30			.10	.15			2.75
New Cumberland	do	.11		.24						T.	T.	.44	.68				T.							T.		.25				.16			1.88
New Martinsville	do	.50				.22							.55																	.40			1.67
Parkersburg ***	Ohio			.08		T.		T.			T.	.08	.10				.15	.12						.28	.13	.29	T.			.02	.03		1.28
Parsons	Monongahela				T.	T.		T.	.62		T.	T.	T.	T.			T.	T.	.75							.05				T.	.39		1.81
Philippi	do					.30		.10			.12	.42														.05				.15	1.40		3.06
Pickens	do	.88							T.		T.	.17	.61					.34	.17	.60				.20	T.	.38		.14		.15	1.60		5.24
Rowlesburg ‖‖	do	.35			.05		1.23		.16				.45		.05			.10	.14	.93						.08	.22	.54			.30	.70	5.30
Saint Marys ‖‖	Ohio	.45					.05			*			.55	.45				.80	T.		T.				.26						.36	T.	2.92
Smithfield ‖‖	Fishing Creek	.28		.01	.52		.28		.06			.30	.60	.03				.08	.04	.02											.31		2.53
Terra Alta	Monongahela			.20				.25				.28				.20										.65	.50			2.10			4.18
Wellsburg	Ohio	.07		.05									.74	T.			T.	.03								1.55	.02			T.	.70		3.16
Weston	Monongahela	.35			.80		.05						.25					.40		.05						.08						1.20	3.18
Wheeling ‖‖	Ohio	.08		.05	T.								.02	.15	T.			.01								.03				1.18			1.52
Southern Division.																																	
Bancroft ‖‖	Great Kanawha	*											.25					.65									.60				.26		1.76
Beckley	do								.28			.22	.12					.85	.91											1.31			3.69
Bluefield	do								.78				.36																		.04		2.23
Breading	do	.11							.31		.06							.16	*	*	*	*	*	*	*	*			.22	.07	.11		1.04
Camden-on-Gauley	do										.15	.33					.25		.80					.25	.40					.92		3.10
Charleston ‖‖	do	.63										.15	T.					.85	.10	.90							T.			.40	.20		3.23
Clay ‖‖	do	.11											.65					.45		.15				.14		2.16	.66			.24	1.26		5.82
Cuba	Sand Creek	.55		.05		T.		T.	T.		T.	T.	.26					.23						.13	1.52	.90	T.			T.	.55		4.19
Dam 19 O. R. ‖‖	Ohio	.21											.24					.41							.47		.37				.01		1.71
Dam 20 O. R. ‖‖	do	.58											.15					.43													.07	.13	1.36
Dam 22 O. R. ‖‖	do	.68				.15		.02					.20					.40							.70		.48					.10	2.73
Dam 26 O. R. ‖‖	do	.33				.10					T.		.30					.72													T.		1.45
Elkhorn	Big Sandy																																
Evans	Ohio	.29						T.				.22					T.	.54													.19		1.24
Gary ‖‖	Big Sandy								.14	.35				.43			.25		.44				.02	.30		1.14	.03			.75	.25	4.10
Green Sulpr. Spgs.	Great Kanawha																																
Hinton ‖‖	do	.34							.40	.14			.18	.78	T.			1.10	.06	1.28					.18	.12	.06			.10	.02	.62	5.38
Holcomb	do							.02						.53					*	1.40				.52	.38	T.			.09		*	1.71	4.65
Huntington ‖‖	Ohio	.64								.04		T.	.24					.24		T.				.26		1.08				.26			2.76
Kayford ‖‖	Great Kanawha	.34							T.	.02		.12	.20	T.				.55	T.	.31			.03	T.	.04	1.36			.09	.08	1.05		4.19
Lewisburg	do	.26							.05			T.	.90	.08				1.58	.07	.52					.02	T.	.02				.45	.47		4.42
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do						.20	T.			.02	.05	.12	.02				.21	.80	.69				.02	.04	1.10		.16	.04	.22	.51	.42	4.62
Suttallburg	do																																
Point Pleasant ‖‖	Ohio	.72					.02						.26					1.35										.08			.26	.30	2.99
Powellton		.08						T.	.01		T.	.20	.20	.03				.80	.24	.46				.05	.90	.20	.10			.03	1.56	.09	4.95
Raleigh ‖‖	Great Kanawha							.16	.21			.17	.21				.90	.01	.18					.33		.27					.59		3.03
Renick ‖‖	do	.40											.46		.20			.65		1.30	T									.25		1.06	4.32
Robertsburg ‖‖	do	.90											.36					.90													.04		2.20
Ryan	do			.08				T.				.10	.17				.06	.65		.06				T.	.01	T.	.01	.72		T.	.27		2.13
Sissonville ‖‖	do																																
Spencer ‖‖	Little Kanawha	.36									T.	T.	.12	T				.37		T.							.48			.08			1.41
Sutton	Great Kanawha												.46	.48					.10	.10					.26					3.86			5.26
Union ‖‖	do								.55			.75	.30				1.40		1.70									T.			1.30		6.00
White Sulphur Spgs.	do											1.20		.50				1.30	.30	.50											.50	.50	4.80
Williamson ‖‖	Big Sandy	.80							T.	.40								.50		.50											.30		2.50

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for July, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	79	76	73	80	77	77	71	69	70	71	69	70	73	72	69	70	72	75	70	73	78	75	70	73	68	71	73	84	81	72	74	73.4
	Minimum	50	55	49	58	54	53	50	50	43	45	48	49	56	50	42	58	57	52	51	53	58	60	57	54	50	52	59	60	64	50	53	52.9
Brandywine	Maximum	75	76	80	84	85	82	77	76	74	74	76	73	74	79	83	85	78	82	80	85	86	84	83	84	83	82	85	87	87	82	79	80.5
	Minimum	55	52	42	50	53	60	55	48	41	46	49	51	55	48	47	51	61	57	61	56	57	56	60	65	62	63	64	60	61	59	58	54.9
Burlington	Maximum	75	77	82	85	80	84	72	71	77	75	78	74	74	82	85	86	78	81	81	86	89	90	89	88	85	90	92	90	90	78	77	82.2
	Minimum	54	53	41	59	50	60	52	47	45	47	53	54	54	57	50	52	64	58	64	55	55	57	60	67	66	62	64	57	55	67	63	56.4
Martinsburg§	Maximum	80	78	86	87	88	89	74	74	80	82	83	81	74	86	90	92	79	84	86	91	96	96	90	90	90	92	92	91	87	72	85	85.7
	Minimum	69	58	51	52	60	62	60	54	54	50	58	60	58	53	58	58	61	60	62	59	61	64	64	67	68	65	60	67	67	68	65	60.4
Moorfield	Maximum	85	78	87	86	86	87	87	74	81	80	85	78	78	83	89	91	80	83	87	90	92	....	94	93	90	90	93	91	93	87	....	86.2
	Minimum	63	55	46	59	56	63	55	47	45	49	52	53	56	52	53	55	65	62	63	59	59	....	65	67	67	65	61	62	63	68	....	58.1
Piedmont	Maximum	83	75	83	86	83	87	71	69	76	76	79	68	75	83	86	87	78	84	81	89	91	92	93	89	85	88	89	85	90	83	75	82.4
	Minimum	61	54	47	55	56	61	52	46	44	49	54	56	51	51	51	55	61	60	63	56	55	58	62	67	67	63	61	58	62	67	62	57.3
Romney	Maximum									86	81	80	75	79	84	89	91	80	82	85	91	94	91	94	92	90	89	90	92	92	85	76	86.2
	Minimum									45	48	50	55	58	50	51	54	64	62	61	56	56	58	55	67	64	64	60	61	62	67	67	58.0
Upper Tract	Maximum	78	78	78	80	80	85	84	80	79	79	75	76	78	80	8	88	77	77	82	86	88	88	89	88	87	88	88	87	87	87	....	82.6
	Minimum	51	50	51	51	57	44	45	42	41	42	42	48	48	48	49	48	61	60	57	57	55	56	56	58	61	48	49	59	60	61	....	52.0
Wardensville	Maximum	76	75	82	85	87	85	80	70	78	76	80	75	76	80	86	88	78	82	84	89	90	90	93	91	89	88	87	87	88	84	71	82.9
	Minimum	64	55	43	56	53	62	55	57	54	48	50	53	55	50	51	55	64	57	62	55	68	70	62	62	60	62	60	74	60	65	61	58.2
Northern Division.																																	
Bens Run	Maximum	74	78	85	92	92	88	70	76	80	80	80	73	81	85	90	81	84	83	82	90	90	90	91	89	85	89	95	93	88	73	83	84.2
	Minimum	58	48	53	64	63	68	57	50	46	60	55	57	55	57	57	58	64	61	64	58	58	64	69	67	68	70	68	69	69	66	60	60.7
Buckhannon	Maximum	77	72	82	85	87	83	74	70	75	74	80	70	74	79	84	87	78	81	81	84	89	89	89	88	88	88	89	90	89	78	75	81.6
	Minimum	58	48	47	60	60	65	56	52	45	51	54	56	53	51	51	55	65	59	63	55	59	59	65	65	65	66	60	60	65	63	60	57.8
Creston	Maximum	78	81	87	89	90	88	78	80	75	75	75	73	85	88	89	82	78	82	91	89	90	92	90	86	89	95	93	90	81	84	84	84.6
	Minimum	51	49	51	62	65	70	57	52	45	56	54	57	54	54	53	57	61	60	64	57	58	63	68	67	67	67	64	67	62	67	60	59.3
Elkins	Maximum	67	70	79	81	82	79	70	64	70	68	70	66	70	75	80	83	75	79	78	82	87	86	87	85	82	87	87	84	85	73	70	77.5
	Minimum	56	49	44	60	56	63	54	48	41	49	51	52	51	50	50	52	62	60	59	56	56	58	65	63	61	62	58	57	64	60	57	55.6
Fairmont§	Maximum	75	80	87	93	91	89	67	74	78	75	75	70	83	85	90	93	80	85	86	90	97	97	94	94	92	94	98	97	93	72	76	85.4
	Minimum	57	47	50	56	60	63	54	50	43	50	53	57	56	55	53	55	59	59	60	58	58	59	62	66	68	68	65	68	69	68	61	58.3
Glenville	Maximum	90	80	87	92	95	94	90	78	80	80	79	80	83	86	93	92	88	88	90	93	95	97	93	91	92	90	95	96	97	92	84	89.0
	Minimum	55	46	50	59	62	68	55	50	45	50	54	57	55	53	51	55	65	60	60	57	56	58	66	63	64	67	65	64	63	65	60	58.0
Grafton	Maximum	83	79	86	90	89	86	83	72	77	74	75	69	81	83	83	90	79	83	83	91	94	94	92	93	92	92	92	91	92	77	79	84.6
	Minimum	56	46	48	59	58	59	54	51	43	54	52	57	56	53	53	53	64	61	62	58	57	60	62	65	65	67	63	62	65	62	60	57.6
Lost Creek	Maximum	78	77	82	89	88	86	71	72	78	74	77	71	80	83	85	84	82	81	88	90	93	91	91	90	87	88	93	93	91	83	80	83.7
	Minimum	55	42	45	49	57	59	51	46	40	53	54	55	50	52	49	51	64	57	55	53	55	57	65	63	64	65	60	60	65	63	61	55.3
Mannington	Maximum	83	74	82	87	87	85	84	70	76	75	72	69	79	81	84	86	80	85	81	86	91	90	89	89	88	87	91	91	88	86	77	83.0
	Minimum	54	43	46	60	56	63	50	46	39	47	51	55	53	51	48	50	63	55	63	54	53	57	66	64	66	66	62	63	65	63	58	55.8
Morgantown	Maximum	73	76	84	89	90	86	86	69	77	76	75	67	78	83	86	90	78	82	84	87	90	90	90	92	89	91	92	90	92	73	78	83.3
	Minimum	56	49	50	59	69	64	58	47	46	55	55	56	51	54	52	57	63	57	60	54	61	61	61	65	67	69	66	65	68	62	58	58.5
New Cumberland	Maximum	79	76	86	86	89	87	76	74	76	77	79	74	79	85	87	87	84	82	85	89	96	92	91	92	86	90	91	92	91	75	78	84.2
	Minimum	55	44	54	54	59	60	52	43	43	50	53	55	50	50	49	51	61	52	57	46	53	61	68	64	64	62	64	65	65	61	51	55.4
New Martinsville	Maximum	82	82	87	94	92	90	80	76	80	80	78	75	83	86	90	86	87	87	85	93	94	95	92	92	90	90	97	98	94	85	83	87.5
	Minimum	58	46	51	62	60	63	55	48	44	53	53	57	55	56	53	54	64	58	63	54	55	62	68	67	68	69	67	66	69	66	58	58.8
Parkersburg	Maximum	73	77	80	90	94	87	71	73	79	78	80	72	80	83	87	84	82	82	81	88	92	90	91	89	88	87	93	92	90	75	81	83.7
	Minimum	59	49	54	65	64	68	59	53	48	61	55	57	55	60	57	60	65	63	63	57	59	69	70	68	69	70	68	69	69	62	58	61.4
Parsons	Maximum	74	79	80	86	83	80	70	66	78	80	75	70	75	80	85	86	77	82	88	89	90	91	92	84	87	92	91	94	88	69	74	81.6
	Minimum	54	43	44	53	53	51	54	52	44	43	44	48	51	56	49	50	61	60	52	55	57	52	60	63	62	63	56	57	61	60	58	53.7
Philippi	Maximum	60	65	70	73	85	70	62	64	69	73	76	70	74	78	67	72	73	75	71	74	79	80	82	88	78	87	91	90	89	74	75	75.3
	Minimum	50	48	47	50	50	60	51	58	51	45	55	50	58	62	53	57	62	60	61	57	58	59	61	67	65	62	62	64	61	63	56	56.9
Pickens	Maximum	79	70	79	80	83	82	73	66	70	70	72	64	70	70	81	83	73	75	75	81	85	85	85	87	69	82	85	83	70	70	67	76.3
	Minimum	53	43	44	57	53	59	59	48	39	49	47	50	49	48	50	55	60	54	55	53	56	56	55	60	58	64	57	56	60	60	54	53.6
Terra Alta	Maximum	78	66	69	77	78	76	70	62	67	67	63	61	71	72	78	81	81	78	76	80	76	85	84	82	79	73	83	79	82	72	71	74.7
	Minimum	52	44	44	56	56	59	49	47	43	48	50	52	49	47	47	50	59	52	56	53	53	55	62	62	60	63	59	60	63	58	57	53.7
Wellsburg	Maximum	71	77	87	91	94	89	84	76	77	80	80	74	82	86	88	87	85	86	86	93	97	95	93	93	92	92	96	94	93	90	82	86.8
	Minimum	58	42	49	54	56	62	49	42	39	50	51	56	50	49	48	47	62	53	56	46	58	50	69	66	66	65	64	64	64	64	53	54.9
Weston	Maximum	82	84	82	87	88	86	83	84	75	74	74	72	77	80	85	85	81	82	86	88	92	91	90	88	85	88	92	92	90	83	79	84.0
	Minimum	57	48	49	60	60	66	58	50	45	53	55	56	52	54	60	55	64	60	56	60	58	59	60	60	65	65	62	62	67	64	61	58.1
Wheeling§	Maximum	72	84	91	97	94	95	77	81	82	82	80	79	86	91	93	91	85	92	86	97	100	97	98	97	92	95	99	101	94	71	87	89.2
	Minimum	57	45	47	48	61	61	54	44	43	45	54	55	51	52	50	50	52	56	56	49	50	59	64	69	68	67	67	66	65	68	56	55.8
Southern Division.																																	
Beckley	Maximum	80	81	81	85	83	86	80	83	73	74	75	75	74	76	81	83	80	75	78	87	83	85	86	86	85	83	84	82	83	81	80	80.9
	Minimum	46	45	46	50	49	56	50	45	48	49	51	49	49	65	49	49	63	60	55	64	59	65	62	61	62	61	59	60	60	61	54	54.9
Bluefield	Maximum	90	89	88	86	88	88	86	87	87	87	86	80	81	81	80	85	86	82	84	83	80	84	86	84	88	83	85	88	84	88	84	85.1
	Minimum	46	41	38	48	46	54	48	47	42	42	41	40	44	42	41	52	52	52	52	51	45	47	57	50	53	47	51	52	51	53	52	47.6
Charleston	Maximum	89	81	88	92	95	91	87	80	83	81	82	85	84	86	91	89	85	85	89	92	90	97	85	91	92	95	94	94	87	80	88.2
	Minimum	59	52	52	60	64	70	60	58	51	52	55	56	57	57	55	56	59	65	65	62	61	65	67	68	69	67	65	66	66	68	62	60.9
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum																																
	Minimum																																
Hinton §	Maximum	76	76	85	88	89	86	87	67	76	75	80	64	76	82	86	89	80	78	79	85	87	89	91	88	89	88	92	86	88	76	75	82.4
	Minimum	59	51	50	50	61	63	61	60	51	51	52	52	54	55	56	56	59	65	62	62	62	63	64	66	65	65	65	64	64	65	64	59.3
Holcomb §	Maximum	70	74	82	85	87	83	82	69	73	73	74	65	68	70	68	66	76	84	80	84	86	86	88	86	85	88	85	84	87	78	72	78.6
	Minimum	52	42	42	45	52	58	56	53	42	44	47	48	51	52	57	56	47	51	58	53	50	54	60	60	57	61	56	57	54	58	60	52.7
Huntington §	Maximum	72	82	89	94	93	91	75	78	82	80	82	78	84	88	89	89	86	81	85	94	92	91	91	84	86	84	93	95	84	73	81	85.3
	Minimum	59	52	55	59	67	70	64	60	53	55	56	57	57	58	57	58	60	65	64	62	61	63	70	70	68	70	67	68	68	70	60	62.0
Lewisburg	Maximum	73	72	80	82	84	79	81	67	74	72	76	73	72	78	81	83	76	77	78	82	83	83	85	85	86	83	84	77	83	76	74	78.7
	Minimum	56	49	45	57	55	64	55	58	41	45	57	49	50	51	48	54	62	59	60	57	59	58	63	63	61	65	58	59	59	63	61	56.2
Marlinton	Maximum	70	70	76	80	82	78	74	66	68	66	68	68	70	74	76	78	74	74	72	78	74	78	84	80	78	76	80	76	76	76	70	74.5
	Minimum	56	44	40	54	52	52	54	52	40	44	48	50	52	50	46	50	60	56	56	54	56	58	60	64	58	60	56	58	56	60	58	53.4
Point Pleasant	Maximum	85	79	87	94	94	93	89	79	80	81	83	76	83	86	91	88	86	86	85	91	91	92	93	91	91	87	95	94	92	84	84	87.4
	Minimum																																
Powellton	Maximum	85	80	87	88	93	91	88	76	78	78	80	75	80	83	89	89	81	82	85	88	89	90	91	88	90	85	93	92	89	87	81	85.5
	Minimum	72	59	66	60	60	67	60	60	47	52	52	56	52	53	52	56	65	52	62	60	61	64	66	64	66	64	66	67	63	64	63	60.4
Robertsburg§	Maximum	72	82	87	83	92	86	72	76	77	79	81	75	81	86	90	84	82	83	93	92	92	90	87	90	86	86	94	97	91	71	82	84.5
	Minimum	56	49	52	59	63	66	59	56	49	57	53	55	55	55	53	56	60	61	59	58	62	66	66	56	66	69	60	65	66	70	60	59.3
Ryan	Maximum	85	85	86	95	94	95	82	81	78	86	81	82	89	88	90	91	89	90	90	94	95	95	96	95	95	96	95	96	95	79	90	89.6
	Minimum	53	43	49	58	59	67	56	47	42	54	52	54	54	52	50	54	67	60	60	50	53	62	65	65	65	67	61	66	66	64	61	57.3
Spencer§	Maximum	73	78	85	90	91	85	78	73	77	78	79	80	81	84	88	88	81	85	80	89	90	91	91	89	92	89	92	91	91	75	80	84.3
	Minimum	57	47	48	55	62	61	57	51	45	50	54	55	53	53	53	53	57	60	61	63	57	63	67	70	67	69	64	66	69	69	60	58.6
Sutton	Maximum	83	82	83	92	92	89	83	73	73	75	75	74	72	74	88	88	86	82	80	86	86	85	87	92	92	89	89	89	89	86	78	83.6
	Minimum	55	52	47	59	60	67	57	51	47	51	57	56	59	56	57	56	54	61	61	56	57	59	64	63	64	66	62	63	64	66	61	58.3
Union §	Maximum	75	84	....	88	....	....	....	90	81	79	82	63	83	78	82	85	82	90	92	91	88	85	84	86	84	88	87	89	88	90	91	....	84.6
	Minimum	48	45	52	....	55	....	....	....	42	48	51	47	52	48	56	52	60	56	58	58	56	58	59	63	60	63	60	65	58	59	60	61	55.4
White Sulphur Spgs.	Maximum	76	77	84	85	87	85	83	80	76	74	77	70	72	79	80	85	78	79	76	88	83	84	89	84	86	85	86	84	84	79	75	81.1
	Minimum	60	45	42	57	57	60	62	57	43	42	45	43	57	51	55	48	53	59	61	69	63	58	64	65	64	65	58	63	69	64	64	56.9
Williamson §	Maximum	73	78	83	88	88	85	81	66	74	75	78	70	78	80	86	86	80	75	80	86	88	88	90	79	89	78	88	90	88	74	75	81.2
	Minimum	59	55	54	56	64	66	62	61	56	54	55	57	55	55	57	58	60	62	63	65	65	65	67	67	68	70	66	66	67	67	63	61.5

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

AUGUST, 1918

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
SEPTEMBER 26, 1918

Departure of the Mean Temperature from the Normal, August, 1918.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVI. PARKERSBURG, W. VA., AUGUST, 1918. No. 8

GENERAL SUMMARY.

The month was exceptionally warm. The highest temperatures of record occurred at practically all stations and the average temperature, 76°, was the highest for any August, except in 1900, when the average was also 76°. While the rainfall averaged practically normal, it was unfavorably distributed throughout the month and over the State, and the severe drought over the western and northern counties in July continued until into the last week in August. The rainfall was sufficient in most of the southeastern and central mountain counties. Good rains were general from the 26th to the 31st. Owing to the drought, the potato crop was nearly a failure in many counties, corn was considerably injured, and pastures were dried up. A fair yield of wheat and rye and a good yield of oats were secured under favorable conditions. Peaches were scarce, but the apple outlook was fair. Buckwheat was generally in good condition at the close of the month.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.06 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.41 inches on the 20th, and 29.84 inches on the 4th. Elkins, 30.41 inches on the 20th, and 29.84 inches on the 26th.

TEMPERATURE.

The monthly mean for the State, 46 stations reporting, was 76.0°. The departure from the normal for 39 stations having ten or more years of record was +4.0°. The month opened with the temperature slightly below the normal, but high temperatures prevailed from the 3d to the 30th, except from the 15th to the 21st, when the thermal conditions were generally near normal. On the 5th, 6th, 7th, the maximum temperatures ranged generally from 100° to 106°. The minimum temperatures on the 20th and 21st were generally between 44° and 50°.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 80 per cent; 8 p. m., 69 per cent. The August averages for the same hours for the past 30 years are 82 and 70 per cent, respectively. Elkins, 8 a. m., 86 per cent; 8 p. m., 78 per cent. The August averages for Elkins for the same hours for the past 18 years are 90 and 81 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 62 stations reporting, was 3.96 inches. The departure from the normal for 42 stations having ten or more years of record was —0.01 inch. The rainfall was heaviest over the southeastern and central mountain counties, and lightest over the southwestern counties. Over the eastern panhandle section the amounts averaged practically normal. Showers occurred in many sections daily from the 7th to the 15th, 17th to the 19th, and 26th to the 31st, with the heaviest rain occurring on the 10th, 13th, 15th, 18th, 28th, and 31st.

HAIL.

Light hail occurred in sections of Pendleton County on the 7th and Jackson County on the 30th, and heavy hail in sections of Greenbrier and Jefferson Counties on the 12th and Grant County on the 30th. Only slight damage resulted.

WIND.

The average wind velocity at Parkersburg was 4.2 miles per hour, or normal as compared with the August average for 28 years. The average at Elkins was 3.7 miles per hour, or 1.0 mile above the August average for 19 years. The highest velocity at Parkersburg was 40 miles per hour from the southwest on the 7th, and at Elkins 30 miles per hour from the northwest on the 26th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 59 per cent of the possible amount, or 3 per cent above the August average for 21 years. The average at Elkins was 51 per cent, or 1 per cent below the August average for 19 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 3d, 11th, 12th, 14th, 20th, 23d, 24th, and 30th; Buckhannon, 1st; Burlington, 1st; Charleston, 2d, 17th, and 24th; Creston, 1st, 3d, 11th, 20th, 23d, and 24th; Dam No. 26(Hogsett, W. Va.), 1st, 2d, and 27th; Elkins, 1st, 2d, 3d, 8th, 16th, 21st, 23d, 24th, 25th, and 26th; Fairmont, 24th; Hinton, 2d, 3d, 6th, 10th, 15th, and 26th; Mannington, 1st, 2d, 11th, 12th, and 23d; Marlinton, 4th, 5th, 6th, 9th, 10th, 12th, 13th, 14th, 15th, 17th, 21st, 22d, 25th, 27th, and 29th; New Cumberland, 1st, 2d, 11th, 12th, 15th, 16th, 20th, 21st, 22d, 23d, and 24th; Robertsburg, 1st, 23d, and 27th; Romney, 1st, 2d, 10th, 15th, 19th, and 23d; Rowlesburg, 1st, 2nd, 3d, 4th, 6th, 7th, 11th, 12th, 13th, 14th, 16th, 20th, 21st, 23d, 24th, 25th, 26th, and 30th; Saint Marys, 1st and 2d; Wheeling, 2d, 3d, 16th, 21st, 22d, 23d, and 24th.

Hail: Brandywine, 7th; Charles Town and Lewisburg, 12th; Evans, 30th.

Halo, lunar: Wheeling, 24th and 25th.

Thunderstorms (dates and number of stations reporting): 6th, 2; 7th, 13; 8th, 7; 9th, 10; 10th, 15; 11th, 5; 12th, 12; 13th, 8; 14th, 8; 15th, 5; 16th, 1; 17th, 1; 18th, 3; 19th, 1; 22d, 2; 23d, 2; 26th, 9; 27th, 1; 28th, 2; 29th, 6; 30th, 14; 31st, 11.

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	69.8	..	....	5.48	....	....	....	..	..	..
1892	72.1	96	41	2.55	....	....	....	..	..	..
1893	70.8	98	41	3.38	....	....	....	..	..	..
1894	71.5	103	38	2.07	5.15	0.27	....	14	12	5
1895	73.3	104	40	3.01	7.69	1.15	....	15	11	5
1896	72.6	97	40	2.82	5.69	0.88	....	15	12	4
1897	70.9	100	42	2.91	5.93	0.77	....	13	14	4
1898	73.7	96	44	7.51	11.57	4.40	....	12	12	7
1899	73.5	100	34	2.64	6.37	0.34	....	15	11	5
1900	76.0	100	45	3.15	7.20	1.03	....	17	10	4
1901	73.6	98	43	5.14	13.70	1.64	....	10	13	8
1902	70.4	98	35	2.40	6.05	0.97	....	15	13	3
1903	71.4	105	38	2.54	5.85	0.99	....	12	13	6
1904	70.7	95	32	2.88	6.71	0.67	....	15	10	6
1905	71.3	96	40	4.25	8.32	1.32	....	14	11	6
1906	75.4	98	47	5.15	10.72	2.18	....	10	13	8
1907	69.4	93	41	4.64	10.12	1.55	....	13	10	8
1908	70.9	101	37	2.82	5.63	0.84	....	15	10	6
1909	70.8	99	37	3.03	5.79	0.81	....	16	10	5
1910	70.8	98	39	2.03	5.58	0.70	....	17	10	4
1911	73.5	105	40	6.71	12.14	2.38	....	13	10	8
1912	69.3	95	35	3.64	11.70	0.25	....	10	13	8
1913	72.7	102	37	3.18	8.20	0.79	....	19	7	5
1914	71.8	100	40	4.86	9.29	1.38	....	15	9	7
1915	69.4	99	36	4.84	8.36	2.46	....	10	11	10
1916	72.9	104	40	4.76	15.35	1.46	....	14	9	8
1917	71.6	102	39	3.53	8.80	0.94	....	17	8	6
1918	76.0	110	43	3.96	9.15	0.63	....	17	8	6
Means and extremes ..	72.0	110	32	3.78	15.35	0.25	....	14	11	6

Climatological Data for August, 1918.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard††	Grant	2,700	17	.....	.....	101	.....	43	21	40	3.66	.....	1.27	0	12	19	5	7	sw.	G. C. Dixon.
Brandywine	Pendleton	.....	2	73.1	.....	101	6	43	21	40	3.66	.....	1.27	0	12	19	5	7	sw.	Elmer Keister.
Burlington	Mineral	875	24	73.2	+ 2.0	105	5	45	20	37	6.03	+2.50	1.45	0	11	9	20	2	w.	I. W. Vandiver.
Harpers Ferry	Jefferson	241	29	.....	.....	.....	.....	.....	.....	.....	3.58	−0.25	1.45	0	8	.....	.....	.....	e.	S. W. Lightner.
Martinsburg	Berkeley	435	26	76.1	+ 3.0	107	6	50	1†	39	4.83	+1.03	1.30	0	12	15	11	5	e.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	22	77.8	+ 4.9	109	6	46	21	43	2.20	−0.95	1.42	0	6	30	1	0	....	M. S. Henkel.
Piedmont	Mineral	919	5	73.8	.....	104	6	48	20	38	3.51	.....	0.78	0	12	10	9	12	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	20	77.1[a]	+ 4.3	109[a]	6	46[a]	21	46[a]	3.51	−0.37	1.20	0	10	12	15	4	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	19	74.0[a]	+ 3.0	101[a]	6	47[a]	20†	44[a]	2.40	−1.62	1.20	0	7	18	9	4	.....	I. M. Mallow.
Wardensville	Hardy	1,200	0	74.7	.....	105	6	50	21	37	4.75	.....	1.30	0	9	21	9	1	s.	Luther F. Sutton.
Averages and	extremes	.....	....	75.0	+ 3.4	109	6	43	21	46	3.83	−0.06	1.45	0	10	17	10	4	e.	
Northern Division.																				
Bens Run	Pleasants	622	16	78.6	+ 4.9	105	6	53	1	37	3.09	−0.68	0.86	0	8	22	8	1	.....	J. D. Riggs.
Brandonville	Preston	1,809	7	.....	.....	.....	.....	.....	.....	.....	4.90	.....	1.43	0	10	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	21	74.4	+ 3.3	99	7	47	21	34	6.05	+2.09	2.00	0	8	24	4	3	.....	H. A. Darnall.
Cortland	Tucker	3,300	2	.....	.....	.....	.....	.....	.....	.....	2.63	.....	1.01	0	7	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	16	78.5	+ 5.3	104	6	53	20	38	2.67	−0.47	1.15	0	9	18	4	9	sw.	J. M. Reed.
Davis††	Tucker	3,093	9	.....	.....	.....	.....	.....	.....	.....	5.16	.....	1.28	0	10	18	8	5	sw.	Ross C. Male.
Elizabeth	Wirt	646	6	.....	.....	.....	.....	.....	.....	.....	6.04	.....	1.23	0	10	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	17	72.2	+ 3.8	99	6	45	21	36	5.43	+1.78	1.35	0	11	4	13	14	w.	U. S. Weather Bureau.
Fairmont	Marion	883	12	77.7	+ 4.9	108	7	50	20	40	3.41	−0.06	1.10	0	9	25	3	3	w.	F. P. Hall.
Glenville	Gilmer	738	24	79.2	+ 5.7	107	6	49	21	44	4.25	+0.33	1.35	0	7	25	4	2	w.	Howard R. Brannon
Grafton	Taylor	1,000	25	76.8	+ 5.3	104	6	47	20	40	4.02	+0.02	1.72	0	10	21	3	7	e.	W. C. Byers.
Lost Creek	Harrison	1,026	20	76.2	+ 5.6	102	6†	45	20	43	4.48	+0.37	2.60	0	8	17	11	3	s.	Allen Smith.
Mannington	Marion	974	15	74.8	+ 3.9	101	6	45	20	39	3.80	+0.34	2.24	0	12	16	7	8	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	25	76.2	+ 4.0	104	7	52	1†	33	4.86	+0.86	1.32	0	9	17	9	14	sw.	R. W. Muldoon.
Moundsville	Marshall	642	15	77.6[z]	+ 4.9	107[z]	5	50[f]	19	38[g]	4.50	+1.62	2.05	0	8	14	4	13	sw.	M. Z. White.
New Cumberland	Hancock	987	20	76.4°	+ 5.6	109[d]	6	47	1	42	4.45	+1.21	1.10	0	6	19[e]	7[e]	2[e]	sw.	M. F. Smith.
New Martinsville	Wetzel	634	24	79.7	+ 5.6	109	6	51	1	42	3.33	+0.03	1.60	0	7	24	5	2	s.	Wm. Ankrom.
Parkersburg	Wood	638	31	78.6	+ 5.4	106	6	55	1	32	5.14	+1.61	1.30	0	13	12	8	11	se.	U. S. Weather Bureau.
Parsons ††	Tucker	1,656	18	73.0	+ 2.9	101	7	41	20	41	3.39	−0.39	2.00	0	5	17	10	4	.....	J. W. Swisher.
Philippi ††	Barbour	1,149	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	w.	Attie G. Robinson.
Pickens	Randolph	2,697	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	31	.....	.....	.....	.....	.....	.....	.....	3.86	+0.10	1.10	0	9	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	9	.....	.....	.....	.....	.....	.....	.....	2.59	−2.24	0.63	0	10	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	12	75.4	+ 4.2	106	6	47	21	44	3.72	−0.52	1.52	0	12	26	4	1	sw.	G. M. Whisler.
Terra Alta	Preston	2,612	17	69.6	+ 1.6	94	7	46	20†	33	4.35	−0.51	1.10	0	6	20	5	6	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	17	75.6	+ 5.6	106	6	46	1†	42	4.32	+0.76	1.44	0	10	15	10	6	w.	George P. Fraser.
Weston	Lewis	1,026	22	76.6	+ 3.3	102	7	48	20	40	4.15	+0.25	2.40	0	8	14	15	2	....	Weston State Hospital.
Wheeling	Ohio	645	31	78.3	+ 5.1	110	6	50	1†	45	4.49	+1.03	1.90	0	10	18	6	7	s.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	76.4	+ 4.6	110	6	41	20	45	4.19	+0.38	2.60	0	9	19	6	6	w.	
Southern Division.																				
Bancroft	Putnam	574	13	76.6	+ 2.8	102	6	54	20†	35	1.83	−2.77	0.50	0	6	28	0	3	se.	R. E. Dent.
Beckley	Raleigh	2,440	17	72.8	+ 3.2	93	5†	46	21†	40	2.92	−0.17	0.65	0	7	19	7	5	w.	John A. Ewart.
Bluefield	Mercer	2,558	22	71.1	− 0.2	96	5†	45	22	43	2.05	−2.30	0.60	0	8	18	10	3	....	Norfolk & Western Ry.
Breading[h]	Mingo	507	0	78.1	.....	103	6	55	20	38	7.71	.....	3.02	0	9	18	11	2	..	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	2	.....	.....	.....	.....	.....	.....	.....	9.15	.....	2.30	0	12	8	5	18	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	14	79.8	+ 4.3	108	6	53	21	41	4.83	+0.51	2.40	0	7	7	7	17	e.	C. V. Lewis.
Clay	Clay	706	1	.....	.....	.....	.....	.....	.....	.....	1.35	.....	0.35	0	6	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	15	76.2	+ 4.2	103	6	51	1	37	3.78	+0.75	1.29	0	9	15	16	0	w	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	1	.....	.....	.....	.....	.....	.....	.....	4.86	.....	1.26	0	11	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	1	.....	.....	.....	.....	.....	.....	.....	4.36	.....	0.85	0	14	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	2	.....	.....	.....	.....	.....	.....	.....	4.21	.....	1.15	0	11	.....	.....	.....	.....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	1	.....	.....	.....	.....	.....	.....	.....	0.63	.....	0.25	0	6	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	I. J. Lincoln.
Evans	Jackson	606	5	78.7	.....	102	6	54	1	32	3.89	.....	1.09	0	7	14	7	10	.....	B. F. Sayre.
Gary	McDowell	1,426	1	.....	.....	.....	.....	.....	.....	.....	4.82	.....	1.50	0	10	.....	.....	.....	..	U. S. Coal & Coke Co.
Green Sulphur Spgs.	Summers	1,600	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Hinton	..do	1,450	20	75.8	+ 1.8	99	6†	51	21†	38	5.08	+1.42	1.98	0	11	12	0	19	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	5	72.1	.....	101	7	45	21	39	5.00	.....	1.34	0	9	16	9	6	.....	R. C. Ferguson.
Huntington	Cabell	538	23	79.5	+ 4.9	105	6	59	20†	32	1.98	−1.79	0.86	0	7	18	3	10	.....	L. H. Hutchinson.
Kayford	Kanawha	1,335	1	.....	.....	.....	.....	.....	.....	.....	3.26	.....	0.70	0	11	.....	.....	.....	.....	Cabin Creek Con. Coal Co
Lewisburg	Greenbrier	2,200	17	72.2	+ 2.2	96	6†	44	21	36	5.81	+0.31	1.69	0	9	21	7	3	s.	Geo. T. Argabate.
Logan	Logan	687	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	18	68.6	+ 0.9	95	5	44	21†	34	5.60	+1.19	1.23	0	14	3	23	5	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	24	80.6	+ 5.9	106	6	55	20†	40	1.44	−1.82	0.65	0	6	7	13	11	sw.	W. D. Holmes.
Powellton	Fayette	933	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	C. M. Dechant.
Raleigh	Raleigh	2,130	1	.....	.....	.....	.....	.....	.....	.....	5.13	.....	1.21	0	8	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	1	.....	.....	.....	.....	.....	.....	.....	4.10	.....	1.30	0	8	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	17	78.3	+ 3.9	106	6	50	20	41	2.92	−0.45	0.77	0	10	13	7	12	.....	E. C. Brace, Jr.
Ryan	Roane	700	14	77.8	+ 5.8	100	6	59	20†	46	2.48	−1.46	1.10	0	10	16	13	2	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	13	78.0	+ 5.7	104	6	53	20†	34	3.08	−0.33	0.66	0	8	6	22	3	.....	A. M. McKown.
Sutton	Braxton	839	11	77.6	+ 2.0	100	7†	50	21	36	4.23	+0.47	1.82	0	9	22	8	1	.....	C. B. Eakle.
Union	Monroe	2,250	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	7	73.6	.....	96	5†	45	20†	38	2.65	.....	1.80	0	6	22	8	1	.....	J. M. Ayres.
Williamson	Mingo	660	17	76.9	+ 1.8	99	16	56	29	31	1.61	−2.37	1.10	0	3	10	15	6	w.	J. F. Keyser.
Averages and	extremes	.....	....	76.0	+ 3.3	108	6	44	21†	46	3.82	−0.59	3.02	0	9	15	9	7	sw.	
State averages and	extremes	.....	....	76.0	+ 4.0	110	6	41	20	46	3.96	−1.01	3.02	0	9	17	8	6	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

z Approximated by the observer.

Daily Precipitation for August, 1918.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac								.08	.02		.60	.08	.38	.02		.08		T.	1.27					.09	T.		T.	.14		.40	.50	3.66
Burlington	do						.12				1.26	1.45	.18		.87				.12	.13			T.				.30		.35	.80	.45		6.03
Harpers Ferry				do		.11					.55					.20		.45		T.	.22							.05		T.	1.45		.55	3.58
Martinsburg	do						1.30				.30	.15		.70	.47			.03	.12						.05	.25				.10	.35	1.01	4.83
Moorefield	do								.28		.07		.03					.09	.31												1.42	2.20
Piedmont	do								.56	.06	.78	.10		T.	.03			.07	.09				.58	.10			.30	.33			.51	3.51
Romney	do			T.				.12	.04	.43		.16	.06	T.				T.	.38							.13	1.20	T.			.72	.27	3.51
Upper Tract	do							.10			.30	.20	T.		T.				1.20						.10						.10	.40	2.40
Wardensville	do			.55					.23		1.30	.65				.15			.55							T.	.10				.60	.62	4.75
Northern Division.																																	
Bens Run	Ohio								.12	.60	.55		.09														.20		.45		.22	.86	3.09
Brandonville |||	Monongahela.							.25	.25	1.43	.22			.78				.12	.13							.29	*	.86		*	.82	4.30
Buckhannon	do							T.		T.	.50			1.10	T.	.22			.28							1.45	.10		T.	.40	2.00	6.05
Central Station	Middle Is. Creek																																
Cortland |||	Monongahela								.20			1.01			.63	.20			.28								.21		.10			2.63
Creston				Little Kanawha							T.	.05	.25				.61		.27	.11			T.						.03		.05	.15	1.15	2.67
Davis				Monongahela							1.28		.03	1.27			.27	.68	.39			T.					.17		.47		.12		.48	5.16
Elizabeth				Little Kanawha						.65			.82	.24			.91	.09	.22										1.10		.13	.65	1.23	6.04
Elkins ***	Monongahela							.19		.24	.03	T.	1.32	.01	1.34	.01		T.	1.05			T.	T.			T.	T.	.01	T.	.03	1.20	5.43
Fairmont |||	do								.05		.20	.77		.51	T.	.64		.01	T.								.09		.04		1.10	3.41
Glenville |||	Little Kanawha									.98	.28	.36	.70		.20													.38			1.35	4.25
Grafton	Monongahela			T.				.18		.13	.07		.06	.41	.30	.13		T.								.68				.34	1.72	4.02
Lost Creek	do								.14	.22	.41		.15		.33	T.		T.	T							.32		T.	T.	.31	2.60	4.48
Mannington	do								.07	.60	.11	.01	.01	T.	.08	.04		T.								.24		.09	.15	.16	2.24	3.80
Morgantown	do							T.		.25	1.15	.21			1.19			T.								.30	T.	.06	.05	.33	1.32	3.86
Moundsville |||	Ohio								.30	.35	.65			.10												.20		.45	2.05	.40		4.50
New Cumberland	do								1.06	.52	.27															T.	T.		1.08	.42	1.10	4.45
New Martinsville	do								.90	.25	.18																.10		.20		.10	1.60	3.33
Parkersburg ***	Ohio							.52		.91	.59	.33	.07		.05	.05			.02				T.			T.	1.07	T.	.11	.11	.91	.40	5.14
Parsons	Monongahela			T.				.38			T	.12		.65	.23													T.				2.00	3.39
Philippi	do																																
Pickens	do																																
Rowlesburg |||	do								.04		.20	.90		.92	.14	.12		T.	.08									.36			1.10	3.86
Saint Marys |||	Ohio								.13	.23	.56	.16	.04	.05	T.	.12											.35		.32		.63	2.59
Smithfield				Fishing Creek								.06	.10	.46	.36		.12		.60		.05		.04						.20	.09	.12		1.52	3.72
Terra Alta	Monongahela											1.10	1.00														.18	.12		1.05	.90	4.35
Wellsburg	Ohio								.76	.05	.37	.21	.02					T.								.31		.35	.08	.73	1.44	4.32
Weston	Monongahela								.10	.35	.50				.15				.05								.55		.05			2.40	4.15
Wheeling |||	Ohio								.26	T.	.58	.70	T.	.04	.04	.12		T.								.10	.20		.55	T.	1.90	4.49
Southern Division.																																	
Bancroft |||	Great Kanawha									.45		.28	.50		.08				.34									.18				1.83
Beckley	do							.15		.53	.11							.50								.52		.65		.46		2.92
Bluefield	do										.60	.10		.25				.02					.10				.32	.36			.30	2.05
Breading	do									.21	.08		2.00	1.02					1.90							.70		.15	.15		1.50	7.71
Camden-on-Gauley	do							.11		.20	.33	.44	2.30	1.00	.25				1.00							.11		.11	1.00		2.30	9.15
Charleston |||	do								.60		.38			2.40			T.		.35								T.	.40	.40		.30	4.83
Clay |||	do								.05						.18		.32									.35	.10				.35	1.35
Cuba	Sand Creek								T.	.38	.05	T.	T.	.25	.05	1.29			T.							.63	T.	.12	.02	T.	.93	3.78
Dam 19 O. R.				Ohio								.07	.40	.86	.24	T.	.08		.11										1.10	.01	.09	.64	1.26	4.86
Dam 20 O. R.				do								.12	.10	.40	51	.14	.85	.20	.30	.05									.53	.01	.15	.30	.70	4.36
Dam 22 O. R.				do								.16		.20	.10		1.15		1.10	.20		.10							.32		.06	.02	.80	4.21
Dam 26 O. R. |||	do											.25		.05					.10	.12						.05	.06					0.63
Elkhorn	Big Sandy																																
Evans	Ohio										.82			.38	T	.35			.25									.15		.90	1.04	3.89
Gary				Big Sandy	.20						.53	.03	.01				.18				1.35							.15	1.50	.20		.67	4.82
Green Sulpr. Spgs.	Great Kanawha																																
Hinton				do								.10		.14	.04		.04		.06	1.12		.04	1.98						.28	.26	1.02			5.08
Holcomb	do							.05		.06			*	1.19	.97	.17			1.34							.23		T.	T		.99	5.00
Huntington |||	Ohio									T.	.08			.08		.40			.72	.14								.32			.24	1.98
Kaytord				Great Kanawha	T.							.19		.31	.20		.18		.16	T.		.70					.23		.08	.69	.26		.26	3.26
Lewisburg	do											.06	.50	.15		1.60			.98	.03					.11	.94					1.44	5.81
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do		T.					.06		.08	.18	.06	.40	.70		T.		T.	.90	.50			.26		1.23		.22		.30		.20	.51	5.60
Nuttallburg	do																																
Point Pleasant |||	Ohio										.48		.05			.09										.05			.12		.65	1.44
Powellton																																	
Raleigh |||	Great Kanawha								.87						.37				1.21							.68	.60	.47		.48	.45	5.13
Renick |||	do											.90			.50	.25			.70	.30							.15	1.30				4.10
Robertsburg				do											.30		.35		.65	.20		.22	.02			.20			.06	.15	T.		.77	2.92
Ryan	do							.08		.20			.06	.08	.07	.25		T.	.27							.05	.32		T.		1.10	2.48
Sissonville |||	do																																
Spencer |||	Little Kanawha								.46	.10	.66		T.	.55		.45			.36										T.	.19	.31	3.08
Sutton	Great Kanawha								.22	.66	.28				.46		32		.05									.07	.35		1.82	4.23
Union |||	do																																
White Sulphur Spgs.	do														.20		.45		1.80						.40		.40				.40	2.65
Williamson				Big Sandy									T.						.01			T.	T.						.50	T.	T.		1.10	1.61

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

+++ Probably incomplete.

Daily Temperatures for August, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum																																
	Minimum																																
Brandywine	Maximum	83	85	86	87	100	101	97	93	85	90	87	92	88	90	85	81	78	70	69	76	83	87	87	88	86	88	80	79	83	84	80	85.4
	Minimum	61	62	60	62	67	67	68	63	66	68	63	66	68	65	65	60	56	60	56	45	43	53	57	60	62	61	62	63	61	58	58	60.8
Burlington	Maximum	83	86	84	92	105	102	96	90	90	87	92	91	87	93	84	81	68	65	71	75	81	88	90	88	85	83	85	78	85	72	81	85.1
	Minimum	54	56	58	64	68	67	67	70	68	67	67	68	68	68	63	55	60	57	55	45	47	57	62	61	64	61	62	69	60	58	52	61.2
Martinsburg§	Maximum	84	91	87	90	104	107	105	96	91	90	88	96	94	94	85	84	72	64	76	78	84	91	93	92	88	87	85	75	85	85	81	87.8
	Minimum	50	53	62	66	66	73	76	70	72	74	70	70	70	68	67	60	60	61	59	50	51	52	62	68	67	68	67	68	66	67	63	64.4
Moorfield	Maximum	86	91	92	95	107	109	106	102	99	98	96	96	90	97	93	87	82	68	76	82	89	95	102	97	92	94	92	85	88	90	82	92.2
	Minimum	51	60	58	65	72	72	71	68	72	71	68	69	70	67	67	55	62	61	59	49	46	56	62	66	64	66	66	64	63	62	64	63.4
Piedmont	Maximum	83	85	86	91	97	104	103	97	89	90	91	93	91	92	88	84	76	73	80	86	88	96	74	72	80	82	88	94	86	78	75	86.6
	Minimum	54	55	59	64	67	74	71	67	71	69	67	69	71	67	64	54	61	57	52	46	56	58	62	54	50	49	60	65	60	52	61	60.9
Romney	Maximum	86	90	89	95	105	109	107	100	95	95	94	96	96	96	93	99	82	70	77	....	96	96	99	97	90	90	85	82	89	88	79	92.0
	Minimum	52	58	58	60	70	75	71	67	66	70	68	69	70	68	61	53	61	59	49	....	46	59	57	67	63	66	63	60	61	62	57	62.2
Upper Tract	Maximum	82	88	....	95	99	101	98	95	95	94	89	90	93	91	90	87	83	80	70	80	84	91	92	92	91	90	85	83	82	86	80	88.5
	Minimum	55	55	....	56	56	70	70	63	64	70	65	65	66	63	62	62	52	51	55	47	47	53	55	60	63	62	61	61	61	59	61	59.6
Wardensville	Maximum	82	82	85	91	102	105	103	97	89	94	91	93	92	93	84	83	76	66	72	77	85	90	93	92	88	91	87	88	86	87	82	87.9
	Minimum	53	57	56	64	67	70	69	65	61	68	61	66	69	65	65	56	69	58	58	58	50	53	61	62	61	63	61	62	63	62	61	61.5
Northern Division.																																	
Bens Run	Maximum	85	80	89	96	100	105	101	96	93	90	92	95	95	93	89	89	86	82	86	88	93	92	95	97	95	82	86	86	83	87	76	90.4
	Minimum	53	57	62	70	77	73	75	79	72	69	70	70	70	74	64	63	65	65	60	55	56	65	68	65	68	68	70	68	70	69	66	66.9
Buckhannon	Maximum	82	84	84	91	93	98	99	92	86	91	90	91	88	91	80	81	82	76	75	79	81	87	89	90	85	87	81	83	80	81	80	85.7
	Minimum	53	58	58	65	74	70	70	65	73	64	69	67	68	68	67	55	61	65	63	48	47	57	63	65	62	63	64	65	65	60	60	63.0
Creston	Maximum	88	90	89	94	103	104	102	96	90	89	92	95	94	93	90	90	89	82	87	86	92	93	95	97	94	89	90	85	80	89	80	91.2
	Minimum	57	60	59	65	75	73	74	67	74	69	69	70	70	72	66	59	63	67	63	53	54	63	67	66	66	67	67	70	66	63	65	65.8
Elkins	Maximum	79	80	81	90	92	99	98	90	83	88	87	89	82	85	80	82	81	68	69	79	81	86	89	87	82	84	81	80	78	82	72	83.4
	Minimum	56	56	56	62	72	69	67	63	68	66	65	67	66	64	56	53	58	61	58	47	45	54	61	64	60	61	63	69	65	63	55	61.0
Fairmont§	Maximum	87	89	86	94	101	107	108	98	91	95	93	96	94	93	89	88	82	74	82	89	91	93	97	97	94	91	90	87	86	86	74	91.0
	Minimum	53	55	59	62	75	75	74	70	72	69	69	71	68	70	64	57	59	62	62	50	51	54	63	66	66	65	68	68	68	66	65	64.4
Glenville	Maximum	88	90	91	95	102	107	105	104	98	91	93	99	99	98	96	91	91	90	85	90	93	96	98	100	99	95	85	87	87	92	91	94.4
	Minimum	58	60	60	63	72	70	71	69	75	66	69	70	69	69	67	58	60	61	60	52	49	59	64	66	62	61	66	66	65	63	64	64.0
Grafton	Maximum	87	89	87	95	100	104	102	96	92	92	94	95	92	93	87	88	79	75	78	87	88	93	97	94	93	89	90	86	85	83	79	90.0
	Minimum	53	57	60	66	71	69	72	67	72	69	67	69	68	68	65	56	61	63	60	47	49	59	64	65	64	64	67	66	65	63	64	63.5
Lost Creek	Maximum	84	87	90	92	96	102	102	93	85	90	89	96	94	93	86	83	80	73	80	85	89	94	96	98	94	91	89	86	84	89	76	89.2
	Minimum	50	57	60	62	76	70	74	65	71	70	67	68	68	70	66	64	59	60	64	45	46	57	62	63	63	63	66	65	67	61	63	63.3
Mannington	Maximum	83	85	84	91	98	101	100	93	90	89	88	93	90	91	85	83	80	77	78	82	86	91	92	94	92	89	84	84	82	80	80	87.6
	Minimum	48	53	56	65	73	68	71	67	71	68	67	68	68	68	61	53	62	61	57	45	47	58	62	60	63	63	66	65	63	64	64	62.1
Morgantown	Maximum	84	87	90	92	96	102	104	95	92	89	90	91	90	90	82	86	80	76	74	85	85	90	93	96	90	89	84	85	81	87	75	88.1
	Minimum	52	59	65	68	68	78	73	67	72	68	70	70	72	68	61	56	60	63	55	53	52	60	65	66	64	65	65	67	69	62	63	64.4
New Cumberland	Maximum	89	92	85	98	106	109	106	98	91	90	96	94	97	93	84	84	80	80	78	81	90	92	97	98	....	....	....	96	....	....	....	87	74	91.3
	Minimum	47	51	61	66	77	75	71	67	72	71	68	69	71	71	54	50	52	54	54	49	52	63	64	59	....	....	....	59	....	....	....	53	62	61.6
New Martinsville	Maximum	89	93	90	97	103	109	106	104	94	90	94	98	97	94	89	90	86	86	89	90	95	94	96	100	98	92	89	86	84	88	83	93.3
	Minimum	51	55	59	69	75	72	75	74	73	72	70	72	75	71	65	60	64	64	60	52	53	62	66	63	69	72	68	69	68	67	65	66.1
Parkersburg	Maximum	86	89	90	97	100	106	103	96	94	88	90	97	96	94	86	86	83	81	80	84	90	92	95	95	92	83	82	84	84	86	75	89.8
	Minimum	55	59	64	71	80	78	71	71	68	70	71	71	71	73	65	65	67	65	63	58	60	67	67	66	70	67	69	69	70	65	62	67.4
Parsons	Maximum	81	83	83	90	93	100	101	91	91	90	90	91	83	88	80	87	88	70	78	82	81	89	93	91	93	88	80	83	83	84	75	86.5
	Minimum	53	55	52	61	62	69	64	65	65	65	67	67	68	68	59	54	55	59	57	41	43	51	59	58	67	58	59	62	60	60	65	59.6
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum																																
	Minimum																																
Terra Alta	Maximum	74	77	73	86	88	86	94	87	81	85	81	84	75	83	78	76	72	61	67	67	79	73	82	87	82	83	81	76	76	76	69	78.7
	Minimum	47	54	57	62	71	70	70	65	67	65	65	67	64	66	60	58	58	54	52	46	46	51	61	65	62	60	66	65	65	60	60	60.6
Wellsburg	Maximum	88	89	85	97	102	106	103	101	92	90	92	95	95	93	85	86	81	76	79	86	90	94	96	96	92	80	83	84	86	82	77	89.7
	Minimum	46	50	58	60	76	72	68	69	73	70	68	69	69	69	55	50	60	60	53	46	49	60	62	58	64	66	61	67	62	57	64	61.6
Weston	Maximum	84	86	85	95	95	100	102	94	88	90	89	94	92	92	91	85	85	76	80	84	89	91	94	97	91	90	82	85	82	86	80	88.8
	Minimum	55	59	60	65	76	75	78	67	71	67	66	70	66	68	67	57	61	63	63	48	49	59	64	65	64	65	67	66	68	63	64	64.4
Wheeling§	Maximum	92	95	90	102	107	110	107	101	98	94	98	100	101	98	93	91	88	84	87	88	96	99	101	101	99	78	90	85	82	84	72	93.9
	Minimum	50	50	53	64	64	70	72	70	70	70	70	70	71	72	60	55	55	63	59	52	52	54	64	63	64	66	65	65	65	62	64	62.7
Southern Division.																																	
Beckley	Maximum	81	81	86	85	93	93	92	91	91	84	88	89	91	86	85	85	84	80	73	84	85	85	86	86	86	85	84	85	81	84	85	85.6
	Minimum	53	52	57	56	67	77	53	69	65	64	66	65	64	65	65	62	65	60	53	60	46	46	46	58	59	56	57	58	62	62	60	59.9
Bluefield	Maximum	83	80	82	91	96	96	89	90	89	88	81	92	88	88	87	82	80	80	78	76	81	88	86	85	85	84	78	74	80	85	81	84.6
	Minimum	51	50	46	52	60	60	63	61	63	70	62	63	65	65	64	62	64	63	56	52	50	45	51	52	55	49	53	54	61	61	64	57.6
Charleston	Maximum	89	91	98	99	102	108	105	98	99	98	100	102	98	99	89	93	92	90	81	87	93	95	97	98	100	95	90	87	89	92	82	94.7
	Minimum	61	63	62	67	68	73	73	67	67	69	70	70	68	69	72	63	62	60	60	55	53	54	66	67	64	65	67	67	66	64	64	65.0
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum																																
	Minimum																																
Hinton§	Maximum	82	86	88	92	97	99	99	96	93	89	93	95	92	93	86	83	89	75	72	77	82	89	90	90	91	89	83	80	87	88	79	87.9
	Minimum	62	62	61	61	63	68	72	67	67	69	69	70	67	67	69	66	63	64	61	53	51	51	60	66	63	62	65	65	64	64	66	63.8
Holcomb§	Maximum	81	82	85	90	96	99	101	92	89	87	88	90	90	87	83	85	87	84	75	80	84	87	88	87	89	87	83	82	80	87	79	86.6
	Minimum	53	55	51	54	58	62	65	62	66	63	62	60	64	61	63	53	54	58	56	50	45	48	55	60	55	58	62	62	58	55	57	57.6
Huntington§	Maximum	83	90	91	98	102	105	98	97	97	88	94	97	97	97	89	92	90	82	84	89	91	88	94	95	92	88	88	84	82	89	78	91.3
	Minimum	60	60	61	67	74	75	78	70	73	71	70	74	72	72	72	63	64	67	67	59	59	61	68	66	68	67	70	68	69	67	67	67.7
Lewisburg	Maximum	80	80	82	87	92	96	96	90	87	86	88	87	89	87	81	84	84	77	68	74	80	85	88	84	84	86	80	79	80	85	76	83.9
	Minimum	59	57	55	59	64	67	69	65	66	65	65	65	62	65	65	57	58	63	57	47	44	52	62	63	63	58	64	63	58	60	62	60.6
Marlinton	Maximum	72	74	78	86	95	92	92	88	86	80	82	80	80	82	78	76	78	70	64	68	74	78	82	80	78	80	72	74	76	78	72	78.9
	Minimum	54	64	54	60	68	66	68	60	64	60	62	62	60	60	62	50	56	60	54	50	44	44	58	58	62	60	58	62	58	56	56	58.4
Point Pleasant	Maximum	88	90	92	97	102	106	102	101	98	92	94	102	99	98	93	93	91	87	85	86	94	98	98	100	95	94	86	86	91	92	87	94.1
	Minimum	68	71	72	67	73	76	73	68	76	71	71	71	68	73	64	60	61	66	65	55	55	66	67	60	65	67	68	67	68	65	65	67.2
Powellton	Maximum																																
	Minimum																																
Robertsburg§	Maximum	90	92	92	98	101	106	102	101	95	90	97	97	97	95	87	87	89	84	82	89	93	93	96	97	94	92	89	87	85	92	79	92.5
	Minimum	55	58	59	62	71	72	70	67	70	71	70	71	69	70	70	59	59	62	64	50	54	52	66	62	63	64	65	67	66	54	65	64.1
Ryan	Maximum	89	92	93	96	98	100	98	98	95	95	95	92	98	97	95	89	94	88	89	90	92	93	96	98	95	92	87	86	85	86	80	92.6
	Minimum	61	66	56	56	70	70	72	66	71	75	70	70	75	72	69	59	70	65	61	50	50	63	64	52	52	55	62	52	62	60	55	62.9
Spencer§	Maximum	81	88	95	93	95	104	101	95	93	90	91	97	93	93	94	87	87	79	81	84	87	92	95	95	90	90	87	87	87	90	75	90.2
	Minimum	56	57	67	78	78	79	78	66	78	69	70	71	70	70	60	58	57	63	62	53	53	65	65	65	65	65	66	66	67	62	63	65.9
Sutton	Maximum	86	88	90	93	96	98	100	100	93	92	87	96	96	95	93	88	83	81	82	86	86	92	94	94	93	91	90	87	87	88	88	90.7
	Minimum	56	60	58	66	68	72	70	67	70	67	68	70	78	72	72	61	60	63	61	56	50	58	64	65	66	63	65	66	62	61	62	64.4
Union§	Maximum																																
	Minimum																																
White Sulphur Spgs.	Maximum	73	75	87	89	96	95	96	95	93	90	92	88	85	89	85	85	87	82	70	76	82	86	88	89	90	88	86	80	85	88	81	86.2
	Minimum	62	60	55	60	58	67	65	65	66	65	64	56	63	65	65	63	64	64	63	45	45	56	58	64	64	66	56	55	60	69	64	61.0
Williamson§	Maximum	83	84	88	92	94	98	96	93	93	84	92	94	93	93	84	99	90	78	78	84	88	86	90	88	93	88	86	83	84	88	73	88.3
	Minimum	63	64	64	65	66	73	75	67	63	70	70	72	70	70	63	69	66	62	62	60	57	58	63	68	62	64	67	69	56	66	66	65.5

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

NWE

UNIVERSITY OF ILLINOIS LIBRARY

OCT 30 1918

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

SEPTEMBER, 1918

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
OCTOBER 25, 1918

Departure of the Mean Temperature from the Normal, September, 1918.



G

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVI. PARKERSBURG, W. VA., SEPTEMBER, 1918. No. 9

GENERAL SUMMARY.

The past month, with an average temperature of 60.5°, was the coolest September of record for West Virginia. The lowest previous September average was 62 4° in 1917. The month was characterized by nearly continuous cool weather, the temperatures being below the normal after the 4th, except two or three days. Damaging frosts did not occur, however, until the 22d, when late corn and vegetables were considerably injured in localities. Heavy to killing frosts also occurred in sections on the 23d, 27th, and 28th; but heavy fogs protected most of the agricultural districts, where growth continued until the close of the month. The rainfall was fairly well distributed and practically normal. The potato crop was light and the yield of corn and apples fair. There was considerable unripe corn at the close of the month.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.09 and 30.11 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.50 inches on the 22d, and 29.80 inches on the 12th. Elkins, 30.51 inches on the 22d, and 29.80 inches on the 12th.

TEMPERATURE.

The monthly mean for the State, 44 stations reporting, was 60.5°. The departure from the normal for 37 stations having ten or more years of record was —5.8°. The month opened with the temperature normal and the readings on the 3d and 4th were from 4° to 5° above the seasonal average, but seasonally cool weather prevailed after the 4th, except two or three days. On the 22d, 23d, 27th, and 28th the morning readings were generally near or slightly below the freezing point, when heavy to killing frosts occurred in many sections.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 84 per cent; 8 p. m., 76 per cent. The September averages for the same hours for the past 30 years are 84 and 71 per cent, respectively. Elkins, 8 a. m., 92 per cent; 8 p. m., 81 per cent. The September averages for Elkins for the same hours for the past 17 years are 92 and 83 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 61 stations reporting, was 2.92 inches. The departure from the normal for 42 stations having ten or more years of record was —0.01 inch. The rainfall was heaviest and generally slightly above the normal over the eastern panhandle section and mountain counties. Over the western counties the amounts were generally slightly deficient. Most of the rainfall was received from the 5th to the 7th, 12th to the 13th, and 16th to the 21st, with the greatest amounts on the 16-17th.

HAIL.

Light hail fell in sections of Brooke and Hancock Counties on the 12th, Roane and Taylor Counties on the 13th, Jackson County on the 17th, and Nicholas County on the 21st. No damage resulted.

WIND.

The average wind velocity at Parkersburg was 4.4 miles per hour, or 0.1 mile above the September average for 28 years. The average at Elkins was 3.7 miles per hour, or 0.9 mile above the September average for 19 years. The highest velocity at Parkersburg was 17 miles per hour from the northwest on the 21st, and at Elkins 24 miles per hour from the west on the 16th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 54 per cent of the possible amount, or 4 per cent above the September average for 21 years. The average at Elkins was 47 per cent, or 6 per cent below the September average for 19 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense (selected stations): Charleston, 23d, 24th, 27th, and 30th; Dam No. 26(Hogsett, W. Va.), 1st, 4th, 9th, 10th, 14th, 22d, 23d, 24th, 25th, 27th, and 28th; Elkins, 1st, 2d, 7th, 9th, 10th, 11th, 14th, 15th, 22d, 25th, 28th, and 30th; Grafton, 14th, 22d, 23d, 24th, 25th, 26th, 27th, 28th, and 29th; Hinton, 2d, 4th, 10th, 11th, 15th, 19th, 23d, 25th, 28th, 29th, and 30th; Huntington, 23d; Marlinton, 1st, 2d, 3d, 4th, 9th, 10th, 13th, 14th, 15th, 16th, 17th, 19th, 22d, 23d, 24th, 25th, 26th, 27th, 28th, 29th, and 30th; New Cumberland, 1st, 2d, 7th, 9th, 10th, 11th, 22d, 23d, 24th, 25th, and 30th; Parkersburg, 11th; Rowlesburg, 1st, 2d, 4th, 7th, 9th, 10th, 11th, 14th, 15th, 16th, 23d, 24th, 25th, 27th, 28th, 29th, and 30th; Wheeling, 1st, 2d, 4th, 7th, 8th, 9th, 10th, 11th, 14th, 18th, 22d, 23d, 24th, 25th, 28th, and 30th.

Frost, heavy: Evans and Hinton, 22d; Morgantown, 22d, 23d, and 27th; Parkersburg, 22d, 27th, and 28th; Powellton, 27th; Romney, 22d and 23d; Smithfield, 22d, 23d, 27th, 28th, and 29th; Wellsburg, 22d, 23d, and 27th.

Frost, killing: Beckley, Bluefield, Brandywine, Breading, Creston, Lewisburg, Lost Creek, Mannington, Marlinton, Moundsville, New Cumberland, Pickens, Spencer, Upper Tract, and White Sulphur Springs, 22d; Buckhannon, Holcomb, and Ryan, 23d; Elkins, Evans, Fairmont, and Wheeling, 27th; Burlington and Wardensville, 28th.

Hail: Evans, 17th; Grafton, 13th; Holcomb, 21st; New Cumberland, 12th; Spencer, 13th; Wellsburg, 12th.

Thunderstorms (dates and number of stations reporting): 3d, 1; 5th, 2; 9th, 1; 12th, 4; 13th, 1; 15th, 1; 16th, 4; 17th, 9; 18th, 2; 19th, 4.

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	66.8	..	....	1.66	....	....	...	..	..	..
1892	64.4	92	32	2.57	....	....	....	..	..	..
1893	65.0	91	29	2.28	4.50	1.05	....	..	..	..
1894	67.8	98	31	2.50	4.75	1.25	....	12	11	7
1895	70.3	107	29	1.70	4.25	0.42	....	17	8	5
1896	65.2	95	22	4.59	9.04	1.58	....	14	9	7
1897	66.4	103	27	1.14	4.00	0.02	....	22	6	2
1898	67.6	97	33	2.42	4.75	0.80	....	16	10	4
1899	64.0	100	26	3.65	6.35	1.65	....	14	9	7
1900	71.1	100	35	1.92	5.50	0.34	....	14	10	6
1901	64.8	95	27	3.35	7.64	1.16	....	13	8	9
1902	64.8	98	25	2.98	4.81	1.23	....	12	9	9
1903	64.7	97	25	1.30	2.78	0.10	....	21	6	3
1904	67.0	95	25	1.76	4.55	0.53	....	16	10	4
1905	65.6	97	29	2.21	4.21	0.54	....	18	8	4
1906	69.9	97	38	3.25	5.44	0.57	....	12	10	8
1907	66.3	93	30	4.41	7.10	2.00	....	12	10	8
1908	65.9	99	24	0.95	2.54	0.26	....	21	6	3
1909	63.7	95	28	2.74	8.75	0.63	....	15	9	6
1910	68.4	97	32	3.50	6.04	0.50	....	12	11	7
1911	68.8	100	32	4.67	8.30	1.80	....	12	11	7
1912	68.6	98	30	3.85	9.18	1.13	....	17	7	6
1913	64.2	100	25	2.88	6.38	0.86	....	14	7	9
1914	63.2	97	24	1.58	5.65	0.17	....	18	6	6
1915	67.6	100	31	3.84	7.18	2.00	....	16	8	6
1916	63.0	99	27	3.71	7.88	1.01	....	18	6	6
1917	62.4	98	23	2.79	6.62	1.16	T.	17	7	6
1918	60.5	93	24	2.92	4.73	1.37	T.	15	7	8
Means and extremes ..	66.0	107	22	2.75	9.18	0.02	T.	16	8	6

Climatological Data for September, 1918.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard††	Grant	2,700	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	2	58.8	.....	82	4†	28	27	46	3.87	.....	1.67	0	7	21	1	8	n.	Elmer Keister.
Burlington	Mineral	875	24	59.4	− 5.3	88	4	32	28	41	3.53	+0.68	.....	0	8	11	15	4	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	29	.....	.....	.....	.....	.....	.....	.....	4.06	+1.22	0.92	0	7	.....	.....	.....	e.	S. W. Lightner.
Martinsburg	Berkeley	435	26	61.2	− 5.3	86	5	39	23†	35	3.28	+0.47	1.60	0	8	18	6	6	nw.	G. W. Van Metre, C. E.
Moorefield[f]	Hardy	900	22	65.0	− 1.8	91	5	32	22	42	2.47	−0.17	1.00	0	7	21	1	2	.....	M. S. Henkel.
Piedmont	Mineral	919	5	60.0	.....	85	4	33	23	39	2.68	.....	0 85	0	11	13[b]	3[b]	7[b]	se.	C. A. Suter, Jr.
Romney[f]	Hampshire	824	20	63.4	− 3.3	89	3†	33	23	46	3.88	+1.39	1.15	0	9	6	12	6	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	19	58.9	− 6.3	84	5	29	22	43	2.93	+0.55	0.75	0	6	15	6	9	w.	J. M. Mallow.
Wardensville	Hardy	1,200	0	59.6	.....	87	6	29	28	41	2.64	.....	0.81	0	9	19	7	4	sw.	Luther F. Sutton.
Averages and	extremes	.....	....	60.8	− 4.4	91	5	28	27	46	3.26	+0.69	1.67	0	8	16	8	6	nw.	
Northern Division.																				
Bens Run	Pleasants	622	16	62.6	− 5.5	89	1	36	27	33	2.68	+0.35	0.65	0	6	24	5	1	.....	J. D. Riggs.
Brandonville	Preston	1,809	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	21	58.6	− 5.8	85	4	31	27	36	2.55	−0.59	0.90	0	5	16	8	6	.....	H. A. Darnall.
Cortland	Tucker	3,300	2	.....	.....	.....	.....	.....	.....	.....	4.41	.....	1.10	0	7	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	16	62.5	− 5.0	87	4	32	27	51	2.21	−0.23	0.70	0	9	13	7	10	w.	J. M. Reed.
Davis	Tucker	3,093	9	.....	.....	.....	.....	.....	.....	.....	3.93	.....	1.20	T.	7	14[f]	5[f]	5[f]	sw.	Ross C. Male.
Elizabeth	Wirt	646	6	.....	.....	.....	.....	.....	.....	.....	3.08	.....	0.82	0	8	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	17	56.6	− 5.3	84	4	29	27	39	3 06	+0.19	1.11	0	12	5	13	12	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	12	60.4	− 6.9	90	4	31	27	42	2.15	−0.45	0.67	0	13	22	0	8	w.	F. P. Hall.
Glenville	Gilmer	738	24	64.2	− 3.5	92	4	31	27	44	3.49	+0.14	1.42	0	9	18	9	3	w.	Howard R. Brannon.
Grafton	Taylor	1,000	25	61.5	− 5.1	90	4	31	27	43	2.64	−0.32	0.92	0	9	12	10	8	e.	W. C. Byers.
Lost Creek	Harrison	1,026	20	60.2	− 5.0	89	4	28	28	47	1.93	−0.90	0.66	0	6	18	6	6	w.	Allen Smith.
Mannington	Marion	974	15	59.0	− 6.4	83	4	29	27	38	2.15	−0.20	0.80	0	9	12	9	9	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	25	61.8[a]	− 5.7	88	4†	35[a]	22†	35[a]	1.64	−1.47	0.59	0	8	13	3	14	sw.	R. W. Muldoon.
Moundsville	Marshall	642	15	.....	.....	.....	.....	32	21†	.....	2.83	+0.28	1.35	0	6	14	2	14	sw.	M. Z. White.
New Cumberland	Hancock	987	20	58.2	− 7.3	83	2	32	23	37	2.62	+0.16	0.96	0	7	8	14	8	sw.	M. F. Smith.
New Martinsville	Wetzel	634	24	62.2	− 6.5	88	4	34	22	38	1.45	−1.26	0.45	0	4	17	4	9	s.	Wm. Ankrom.
Parkersburg	Wood	638	31	61.0	− 5.2	86	4	35	23	34	2.53	−0.19	0.81	0	11	12	10	8	se.	U. S. Weather Bureau.
Parsons ††	Tucker	1,656	18	57.6	− 5.7	85	4	29	27	40	3.90	−0.32	2.00	0	4	18	3	9	.....	J. W. Swisher.
Philippi ††	Barbour	1,149	21	56.6	− 9 0	89	3†	30	24	44	2.13	−1.07	0.60	0	8	11	10	9	.....	Attie G. Robinson.
Pickens	Randolph	2,697	15	56.2[a]	− 5.6	81[a]	2	26[a]	27	39[a]	3.35	−0.64	1.52	0	7	17	5	8	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	31	.....	.....	.....	.....	.....	.....	.....	4.22	+1.22	1.26	0	11	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	9	.....	.....	.....	.....	.....	.....	.....	3.22	+0.86	0.65	0	10	.....	.....	.....	w.	Wm. Hughes.
Smithfield	Wetzel	835	12	59.2	− 6.2	88	14	31	22†	45	3.21	−0.28	0.80	0	13	20	6	4	sw.	G. M. Whisler.
Terra Alta	Preston	2,612	17	55.6	− 7.5	77	2	30	23	35	3.25	−0.48	1.50	0	7	14	6	10	w.	A. F. Wilhelm.
Wellsburg	Brooke	1,225	17	58.8	− 5.9	84	2	31	22†	37	2.55	−0.30	0.66	0	9	13	10	7	w.	George P. Pfister.
Weston	Lewis	1,026	22	61.2	− 6.2	87	4	31	27	40	2.25	−0.76	1.10	0	5	17	5	8	.....	Weston State Hospital.
Wheeling	Ohio	645	31	60.7	− 6.0	89	2	34	22†	41	2.87	+0.28	0.95	0	12	15	6	9	w.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	60.0	− 5.8	92	4	26	27	51	2.81	−0.21	1.52	T.	8	15	7	8	w.	
Southern Division.																				
Bancroft	Putnam	574	13	60.6	− 8.7	85	2†	34	27	40	2.16	−0.70	0.70	0	7	20	0	10	ne.	R. E. Dent.
Beckley	Raleigh	2,440	17	61.3	− 2.3	84	6†	31	22	45	2.15	−0.54	0.50	0	6	19	6	5	w.	John A. Ewart.
Bluefield	Mercer	2,558	22	60.0	− 6.2	83	1	30	22	35	3.68	+0.96	0.85	0	14	17	3	10	.....	Norfolk & Western Ry.
Breading	Mingo	507	0	63.2	.....	89	4	34	28	41	1.92	.....	0.60	0	7	17	9	4	.....	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	2	.....	.....	.....	.....	.....	.....	.....	3.33	.....	1.00	0	7	14	0	16	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	14	65.8	− 4.4	93	4	37	27	45	3.63	+0.68	1.00	0	7	.....	.....	.....	e.	C. V. Lewis.
Clay††	Clay	706	1	.....	.....	.....	.....	.....	.....	.....	2.48	.....	0.67	0	6	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	1	.....	.....	.....	.....	.....	.....	.....	3.45	.....	0.63	0	11	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	1	.....	.....	.....	.....	.....	.....	.....	3.20	.....	0.77	0	10	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	2	.....	.....	.....	.....	.....	.....	.....	1.37	.....	0.68	0	5	.....	.....	.....	.....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	1	.....	.....	.....	.....	.....	.....	.....	1.82	.....	0.52	0	8	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans	Jackson	606	5	61.2	.....	85	4	30	28	40	4.19	.....	1.32	0	6	17	1	12	.....	B. F. Sayre.
Gary	McDowell	1,426	1	.....	.....	.....	.....	.....	.....	.....	4.71	.....	1.39	0	13	13	12	5	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Hinton	...do	1,450	20	61.2	− 6.9	86	4	36	27	35	2.92	+0.20	0.86	0	11	10	2	18	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	5	57.6	.....	87	4	30	27†	43	4.10	.....	1.96	0	7	15	7	8	.....	R. C. Ferguson.
Huntington	Cabell	538	23	60.8	− 7.7	87	4	37	27	32	3.14	+0.79	0.96	0	10	21	0	9	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	1	.....	.....	.....	.....	.....	.....	.....	3.22	.....	0.82	0	12	.....	.....	.....	.....	CabinCreek Con.Coal Co.
Lewisburg	Greenbrier	2,200	17	58.8	− 5.7	85	4	28	22	38	2.87	+0.12	1.15	0	7	17	6	7	s.	Geo. T. Argabate.
Logan	Logan	687	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	18	54.3	− 7.9	76	4	28	22†	32	4.73	+1.53	2.60	0	7	8	14	8	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	24	63.3	− 6 2	91	4	33	27	44	2.70	+0.42	1.10	0	7	12	8	10	sw.	W. D. Holmes.
Powellton	Fayette	933	21	.....	.....	.....	.....	34[u]	22†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. M. Dechant.
Raleigh	Raleigh	2,130	1	.....	.....	.....	.....	.....	.....	.....	2.75	.....	0.57	0	10	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	1	.....	.....	.....	.....	.....	.....	.....	2.85	.....	0.92	0	6	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	17	61.6	− 6.9	92	4	33	27	46	1.69	−0.71	0.50	0	7	17	2	11	.....	E. C. Brace, Jr.
Ryan	Roane	709	14	.....	.....	88	4†	.....	.....	.....	1.84	−1.04	0.60	0	10	17	5	8	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	13	60.4	− 5.8	89	4	24	23	49	2.76	−0.42	0.66	0	7	4	12	14	.....	A. M. McKown.
Sutton	Braxton	839	11	62.0	− 8.7	88	4†	34	23†	36	2.40	−0.93	0.88	0	7	23	4	3	.....	C. B. Eakle.
Union	Monroe	2,250	13	.....	.....	.....	.....	28[z]	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Shanklin.
White Sulphur Springs	Greenbrier	1,940	7	61.1	.....	88	3	31	24†	44	2.40	.....	0.90	0	4	24	4	2	.....	J. M. Ayres.
Williamson	Mingo	660	17	64.2	− 5.6	89	4	39	27	33	2.65	−0.30	1.00	0	9	13	11	6	w.	J. F. Keyser.
Averages and	extremes	.....	....	61.0	− 6.4	93	4	24	23	49	2.91	0.00	2.60	0	8	16	5	9	w.	
State averages and	extremes	.....	....	60.5	− 5.8	93	4	24	23	51	2.92	−0.01	2.60	T.	8	15	7	8	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

z Approximated by the observer.

Daily Precipitation for September, 1918.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac																																
Brandywine	do				T.	.72	.45		.17				.23						1.67		*	.63										3.87
Burlington	do			.25	.20	.30			T.				T.	.24		.97	*	1.27			.30											3.53
Harpers Ferry ‖‖	do	.80					.45		.42									.92		.40	.42	.65										4.06
Martinsburg	do			T.		*	1.60		.12				T	.18		.05	.06	.06	.40		.87					T.					3.28
Moorefield	do						.37		.09				.02	.22				.17	1.00		.60											2.47
Piedmont	do			.08		.06	.07		.07				.05	.08			.12	.75	.85		.42	.13				T.					2.68
Romney	do			.15	T.	*	1.10		10				.08				.15	.50	1.15		.65											3.88
Upper Tract	do					.70	.40	T.	.20									.48	.75		T.	.40										2.93
Wardensville	do	T.			T.	.02	.81		.09	T.				.01				.43	.28	.22	.33	.45										2.64
Northern Division.																																	
Bens Run	Ohio			.65		.17							.60				.15	.46			.65											2.68
Brandonville ‖‖	Monongahela																																
Buckhannon	do				T.	.20	.15						T.	T.				.90	.40		.90						T.					2.55
Central Station	Middle Is. Creek																																
Cortland ‖‖	Monongahela	.98					.29						.42					1.10	.80		.63	.19										4.41
Creston ‖‖	Little Kanawha	.70		.15	.02		.10		T.				.15	.21			T.	.39			.46						.03					2.21
Davis ‖‖	Monongahela									.60				.31				1.20	.95	.45		.30	.12					T.				3.93
Elizabeth ‖‖	Little Kanawha	.82		.33	.33		.16						.18				.29	.53			.44											3.08
Elkins ***	Monongahela			.11		.15	.06	.02	.01			T.	.15				.30	.53	1.11	.15	.46	.01				T.				T.		3.06
Fairmont ‖‖	do	.67		.04	.13		.01		.02			T.	.05	.22			.02	.58			.30	.03	T.			.01	.07					2.15
Glenville ‖‖	Little Kanawha	1.42		.26		T.	.12		.16				.14	.10				.75	.09		.45											3.49
Grafton	Monongahela	.07		.05		.57					T.		.08	.50			.12	.87	.05		.33											2.64
Lost Creek	do			.20		.10							.14	.18			T.	.66	T		.65					T.				T.		1.93
Mannington	do			.26		.06				.25			.21	T.			.05	.80			.37	.01				.14						2.15
Morgantown	do			.12		.10	.05				T.		.24	.25			.03	.59	T.		.26											1.64
Moundsville ‖‖	Ohio					.20						.40	.20				1.35			.50						.18						2.83
New Cumberland	do			T.		.96			T.				.37				.40	.23	T.	T.	.36	.64				.26				T.		2.62
New Martinsville	do			.40		.20							.40	.45																		1.45
Parkersburg ***	Ohio			.81	.18	.18						.09	.27			.09	.48	.04	.01	.37						T.				.01		2.53
Parsons	Monongahela			.25		.25							T.	.50			T.	T.	2.00													3.00
Philippi	do																																
Pickens	do				.27				.04				.11					1.31	1.52		*					.10						3.35
Rowlesburg ‖‖	do	1.26		.03	.13		.24	.04					T.	.50				.82	.54	.05	.43	.18										4.22
Saint Marys ‖‖	Ohio	.65		.29	.35	.03	.18						.20	.30	T.		.15	.55	T.		.52		T.			T.						3.22
Smithfield ‖‖	Fishing Creek	.73		.15	.31		.07		.01				.20	.30			.08	.80		.01	.44	.03				.08						3.21
Terra Alta	Monongahela	.20					.20										1.50	.85			.25	.10						.15				3.25
Wellsburg	Ohio			.04		.17							.65	.09			.45	.66		.03	.44	.02				T.				T.		2.55
Weston	Monongahela					.40							.25					1.00	.10		.50											2.25
Wheeling ‖‖	Ohio	.35		.15	T.	.05	.05						.20	.37			.06	.95		.04	.52	.01				.12	T.					2.87
Southern Division.																																	
Bancroft ‖‖	Great Kanawha	.70		.21			.05						.10	.12				.45			.53											2.16
Beckley	do	.41			.16	.50		.41					.21								.46											2.15
Bluefield	do				.05	.45	.63		.85	.08			.01	.01				.06	.73	.06	.58		.02			.13	.02					3.68
Breading	do			.18		.28	.02						.22					.60			.50					.12						1.92
Camden-on-Gauley ‖‖	do			.12		.11							.20					.80	1.00	.30	.80											3.33
Charleston ‖‖	do	1.00		T.	.25		.50						.10					.40	.64	T.	.74					T.	T.					3.63
Clay ‖‖	do	.67					.49							.15				.37	.26		.54											2.48
Cuba	Sand Creek																																
Dam 19 O. R. ‖‖	Ohio	.50		.63	.34	.11	.13						.21	.25			.21	.60		.02	.45											3.45
Dam 20 O. R. ‖‖	do	.04		.60	.15	.03	.18						.15	.45			.31	.77			.52											3.20
Dam 22 O. R. ‖‖	do	.68		.22	05		.34						.08																			1.37
Dam 26 O. R. ‖‖	do	.25		40		.35	.10						.05	.10			T.	.05			.52					T.	T.					1.82
Elkhorn	Big Sandy																																
Evans	Ohio			.45		.22						1.00	1.32					.70			.50											4.19
Gary ‖‖	Big Sandy	.01	.01		.15	.88		.90					.30	.01			.15	1.39	.02	.30	.47					.12						4.71
Green Sulpr. Spgs.	Great Kanawha																																
Hinton ‖‖	do	.18		T.			.66		.46	.02				.12				.04	.86	.06	.20	.26	.06										2.92
Holcomb	do				T.	*	.65						.76					*	1.96	*	.73	T.				T.						4.10
Huntington ‖‖	Ohio	.32		.94	.02	.20	.32						.04	.22			.04	.56			.48					T.	T.					3.14
Kayford ‖‖	Great Kanawha	.58				.13	.59		.13				.06	.07				.82	.27		.32	.17				*	.08					3.22
Lewisburg	do					.52	.27		.36					.05				.26	.89		.52											2.87
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do			.08		.53			.58				.04					.42	2.60		.48					T.						4.73
Nuttallburg	do																																
Point Pleasant ‖‖	Ohio			.43		.40							.11	.26			.20	1.10			.20											2.70
Powellton																											.06					†††
Raleigh ‖‖	Great Kanawha	.40		.03	.10	.57		.41					.23				.23	.56	T.	.17							.05					2.75
Renick ‖‖	do						.92		.33	T.								.20	.90		*	.50										2.85
Robertsburg ‖‖	do	.27		.19			.18						.10	.15				.30			.50											1.69
Ryan	do			.19		.11			.02			.06	.29				.02	.45	.01	.09	.60											1.84
Sissonville ‖‖	do																																
Spencer ‖‖	Little Kanawha	.66		.26	.11		T.		T.				.17	.55			T.	.50			.51					T.						2.76
Sutton	Great Kanawha					.20	.21		.12				.05					.88	.10		.84											2.40
Union ‖‖	do																	1.40				.75										†††
White Sulphur Spgs.	do					.65			.40										.90		.45											2.40
Williamson ‖‖	Big Sandy	1.00			.08		.32		.09				T.	.02				.35	.21		.43	T.					.12					2.65

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

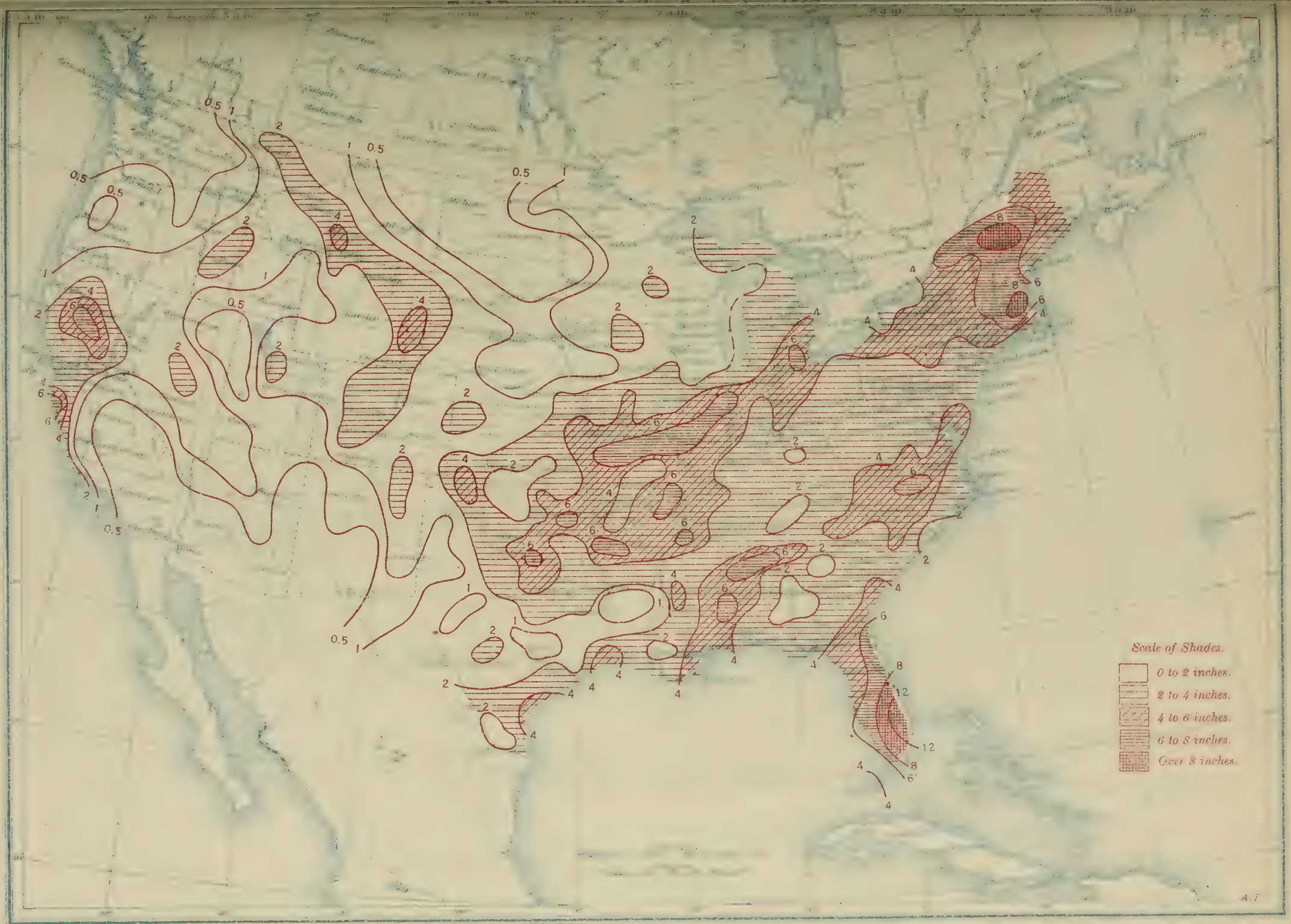
T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for September, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum																																
	Minimum																																
Brandywine	Maximum	78	76	80	82	81	68	74	90	68	75	74	72	70	75	76	82	73	73	79	68	65	64	69	72	68	65	74	71	72	74		72.9
	Minimum	48	52	55	59	60	56	50	48	44	42	48	45	46	41	43	56	59	54	45	47	40	29	34	37	40	34	28	29	31	39		44.6
Burlington	Maximum	76	80	82	88	73	83	69	64	74	78	67	72	69	72	80	68	71	79	78	68	59	60	65	70	74	64	65	73	71	73		72.2
	Minimum	49	51	52	60	54	58	49	52	44	46	56	57	51	42	43	58	53	48	49	47	43	33	33	38	37	50	41	32	40	36		46.7
Martinsburg§	Maximum	79	81	78	84	86	69	72	62	77	81	69	73	73	74	79	83	72	73	80	56	59	62	67	71	74	65	66	71	73	73		72.7
	Minimum	55	55	56	62	65	57	56	56	48	49	49	50	54	47	48	58	62	55	52	52	44	40	39	39	47	47	42	40	40	41		49.8
Moorfield	Maximum	85	85	84	87	91	77		74	78	84	78	75	79	79	84	87	80	78	85	78	58	67	75	80						79		79.5
	Minimum	53	54	60	61	70	58		52	47	45	57	59	51	43	45	62	61	54	48	46	40	32	35	38						39		50.4
Piedmont	Maximum	80	84	76	82	85	69	71	65	76	80	70	69	69	74	80	81	65	71	82	66	54	62	66	71	75	62	65	75	71	72		72.2
	Minimum	54	50	60	60	65	57	49	54	44	45	54	58	48	42	44	57	58	52	49	47	42	35	33	39	40	51	38	36	40	36		47.9
Romney	Maximum	80	88	89	86	89	74	79	71	82	84	72	75	74	80	84	86	78	75	86	72	58	65	68							80		78.1
	Minimum	52	42	49	62	61	57	49	55	45	45	55	58	50	41	42	59	58	53	48	42	43	35	33							35		48.7
Upper Tract	Maximum	80	81	80	80	84	76	76	70	71	76	76	75	75	75	79	83	75	75	75	69	70	70	70	72	72	70	73	74	75	74		75.0
	Minimum	47	49	49	50	55	56	50	48	47	42	43	48	40	39	44	44	44	51	50	44	40	29	32	32	34	40	38	32	32	36		42.8
Wardensville	Maximum	81	80	81	81	82	87	68	68	62	76	81	71	73	73	76	80	86	69	74	81	58	60	62	70	73	77	69	70	74	73		73.9
	Minimum	53	56	60	59	59	57	49	50	50	43	44	45	48	48	44	44	60	53	42	47	42	32	32	32	33	40	39	29	34	36		45.3
Northern Division.																																	
Bens Run	Maximum	89	85	82	86	77	72	74	75	80	80	76	75	69	77	83	77	69	70	71	59	56	65	70	73	76	63	65	72	73	75		73.8
	Minimum	58	55	63	64	59	54	50	57	52	56	54	59	50	48	53	61	56	55	50	48	44	37	48	52	55	46	36	39	44	42		51.5
Buckhannon	Maximum	75	81	75	80	82	64	67	66	72	75	70	72	67	71	80	78	70	66	77	72	55	57	65	68	72	63	59	68	67	73		70.3
	Minimum	55	58	63	55	57	54	49	48	43	48	48	60	49	42	44	60	55	55	53	47	42	33	33	37	39	48	31	32	38	37		46.8
Creston	Maximum	83	84	83	87	80	67	73	79	81	82	79	76	70	81	85	79	74	74	75	67	56	66	72	76	80	73	68	84	74	77		76.2
	Minimum	56	59	64	64	62	56	49	57	48	50	52	60	46	45	48	61	55	57	50	48	41	34	35	39	40	52	32	33	39	39		48.8
Elkins	Maximum	74	79	73	84	78	60	69	61	71	73	74	72	63	70	78	77	63	65	77	55	47	57	64	67	71	59	60	70	65	74		68.3
	Minimum	53	50	60	59	55	50	48	47	44	45	48	57	45	41	42	59	53	53	53	41	36	33	33	37	37	36	29	31	35	39		45.0
Fairmont§	Maximum	82	88	79	90	80	71	76	73	80	80	80	77	70	77	83	75	62	69	80	50	53	64	71	74	77	62	68	74	73	77		73.8
	Minimum	58	54	55	61	61	56	48	50	47	48	52	55	49	44	45	52	58	55	54	48	42	33	35	36	38	41	31	32	34	38		47.0
Glenville	Maximum	82	88	85	92	90	72	78	77	83	85	85	80	76	85	87	89	77	74	85	83	58	66	73	78	82	78	70	77	76	83		79.8
	Minimum	56	51	62	64	64	55	48	55	48	50	53	58	47	45	48	69	55	56	49	47	38	34	34	39	41	48	31	35	35	39		48.5
Grafton	Maximum	81	86	78	90	83	67	72	69	79	80	78	76	71	78	84	76	73	72	82	69	54	63	71	74	78	72	65	77	72	76		74.9
	Minimum	57	52	62	60	63	54	47	54	47	48	52	60	48	45	46	60	55	55	54	46	41	34	34	38	40	49	31	34	38	38		48.1
Lost Creek	Maximum	80	86	80	89	72	69	71	69	79	80	78	75	70	76	83	78	68	70	81	70	55	64	71	74	79	67	73	75	72	78		74.4
	Minimum	55	48	62	64	58	54	45	53	43	46	50	61	45	40	43	60	55	55	49	46	39	29	30	35	36	50	29	28	37	34		46.0
Mannington	Maximum	76	82	76	83	78	67	71	69	75	75	75	72	72	72	80	78	69	67	76	69	52	58	65	69	73	70	62	69	68	72		71.3
	Minimum	55	50	62	59	61	55	45	54	43	47	50	60	45	44	45	61	55	55	50	47	40	30	32	36	39	49	29	31	38	35		46.7
Morgantown	Maximum	82	85	73	88	88	66	73	70	72	79	78	74	70	75	79	75	70	70	75	64	52	60	68	72	75	71	66	72	68	75		72.9
	Minimum	56	60	54	59	63	52	47	55	58	51	58	59	49	45	54	61	52	54	51	48		35	36	40	42	52	35	58	48	40		50.8
New Cumberland	Maximum	81	83	80	80	76	69	70	71	81	69	74	70	69	75	77	70	70	69	66	53	54	63	65	72	75	66	73	67	68	59		70.5
	Minimum	48	47	64	55	57	47	42	61	44	43	44	56	48	45	47	58	50	40	39	44	43	33	32	35	44	46	37	44	45	36		45.8
New Martinsville	Maximum	82	84	80	88	82	75	75	75	82	77	74	75	71	78	83	79	74	71	70	64	57	67	72	73	77	70	69	74	73	74		74.8
	Minimum	58	54	64	65	62	55	48	55	49	53	53	60	50	46	50	63	55	52	50	48	42	34	37	42	43	53	35	36	41	39		49.7
Parkersburg	Maximum	80	85	82	86	75	67	72	73	78	77	75	74	69	75	83	77	64	71	68	54	54	61	68	72	78	61	64	71	68	75		71.9
	Minimum	58	55	65	63	59	53	51	56	51	55	53	57	51	46	53	62	58	56	50	48	45	35	38	41	44	43	36	37	46	42		50.1
Parsons	Maximum	72	78	72	85	80	68	75	65	73	77	75	73	67	73	80	79	64	66	78	59	50	57	66	69	74	58	61	71	68	70		70.1
	Minimum	47	50	58	56	60	50	47	48	43	43	53	61	47	43	42	55	54	53	49	43	41	35	33	35	39	39	29	31	32	33		45.0
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum	78	81	75	73	60		73	60	72	73	67	72	67	74	79	72	65	65	78	63	45	63	68	65	74	58	63	68	70	78		68.9
	Minimum	55	48	55	54	50		42	48	40	43	45	57	43	39	44	55	51	51	49	39	37	29	31	38	40	41	26	33	40	39		43.5
Terra Alta	Maximum	73	77	70	69	74	60	65	59	69	71	70	68	68	69	74	71	67	57	73	69	44	53	61	61	68	67	67	60	61	68		66.1
	Minimum	62	48	51	65	59	49	43	49	40	44	54	56	56	39	40	57	49	48	51	40	38	32	30	38	34	38	32	34	43	33		45.1
Wellsburg	Maximum	81	84	80	82	78	69	73	72	78	76	75	73	69	74	79	72	72	68	66	57	52	61	67	71	74	68	65	71	69	69		71.5
	Minimum	52	49	63	56	60	49	43	52	48	49	45	60	46	45	45	61	53	43	41	46	44	31	35	37	43	52	31	34	40	33		46.2
Weston	Maximum	79	83	79	87	79	68	71	69	78	79	78	75	71	76	83	77	72	70	80	78	69	60	68	72	77	63	65	73	71	78		74.3
	Minimum	57	51	62	60	61	55	49	55	46	49	52	60	48	45	46	60	55	55	51	47	42	33	34	39	40	51	31	33	40	38		48.2
Wheeling§	Maximum	87	89	82	86	74	75	79	77	85	80	75	77	71	80	79	73	67	72	64	55	54	68	75	77	82	66	71	75	75	77		74.9
	Minimum	56	54	51	60	60	52	46	42	50	50	51	51	47	47	48	53	53	47	45	45	43	34	34	41	42	46	31	36	37	39		46.5
Southern Division.																																	
Beckley	Maximum	74	80	81	83	83	84	82	84	80	81	80	75	75	80	81	75	80	81	80	75	75	76	75	75	70	70	75	75	80	84		78.3
	Minimum	49	53	59	65	48	49	43	48	45	46	44	45	44	46	48	45	48	47	45	45	40	31	33	36	32	32	34	49	39	40		44.3
Bluefield	Maximum	83	82	79	79	77	66	59	58	70	74	74	72	69	72	80	80	79	66	79	74	72	53	68	70	74	72	69	72	72	75		72.3
	Minimum	59	60	51	57	55	44	50	50	48	43	60	50	54	52	52	51	59	57	50	40	39	30	33	38	41	44	37	38	43	42		47.6
Charleston	Maximum	84	90	85	93	87	79	80	79	79	78	79	78	80	84	90	87	85	83	89	79	76	70	74	74	85	79	80	79	79	85		81.3
	Minimum	51	54	56	64	65	57	50	51	50	50	52	54	48	49	59	62	59	56	52	51	50	43	38	41	42	44	37	39	41	40		50.2
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum																																
	Minimum																																
Hinton§	Maximum	79	82	81	86	84	60	70	62	75	77	78	78	73	75	79	85	72	72	80	54	54	62	68	73	75	63	64	70	71	75		72.7
	Minimum	58	55	56	60	65	56	54	54	50	50	51	52	50	50	50	50	59	60	52	53	40	39	38	40	43	48	36	38	42	43		49.7
Holcomb§	Maximum	76	81	80	87	81	59	72	65	74	78	76	74	68	73	83	82	76	70	79	49	58	62	69	72	75	58	65	68	72	77		72.0
	Minimum	50	45	52	54	60	53	45	49	39	41	44	44	45	40	40	54	57	50	44	48	41	36	31	33	37	38	30	30	32	34		43.2
Huntington§	Maximum	82	83	84	87	72	69	74	76	78	59	76	74	71	82	81	80	60	73	70	50	58	60	67	72	75	59	61	69	64	75		71.4
	Minimum	59	55	57	65	65	55	51	51	50	51	55	58	51	50	51	54	55	55	52	50	45	41	40	41	45	48	37	38	40	43		50.3
Lewisburg	Maximum	78	78	78	85	79	67	67	61	73	75	75	73	69	75	79	81	74	70	79	70	51	61	69	71	73	66	67	71	72	75		72.1
	Minimum	48	47	55	60	62	55	52	51	47	44	46	56	46	42	41	56	60	58	45	42	39	28	31	35	37	42	30	34	37	40		45.5
Marlinton	Maximum	70	72	70	76	72	64	64	60	66	68	66	66	64	66	70	74	66	64	70	60	50	56	60	62	68	56	60	64	66	66		65.2
	Minimum	50	48	50	54	56	48	44	50	44	42	44	54	42	42	40	54	56	54	42	42	38	28	32	34	36	42	28	32	36	40		43.4
Point Pleasant	Maximum	83	89	87	91	88	74	77	80	86	87	82	77	74	81	87	81	78	75	71	66	60	65	69	77	82	74	69	74	75	83		78.1
	Minimum	53	51	67	61	60	49	47	52	48	54	51	59	46	46	51	61	54	55	45	47	41	38	37	36	43	54	33	35	41	39		48.5
Powellton	Maximum																						60	70	72	75	67	62	72	73	79		
	Minimum																						34	55	57	44	49	34	37	40	46		
Robertsburg§	Maximum	84	88	85	92	74	70	72	79	81	83	81	79	73	82	86	82	62	76	76	55	58	67	75	75	78	81	79	77	72	82		76.8
	Minimum	55	52	53	52	53	52	48	49	48	49	52	55	47	46	46	47	55	55	47	49	40	34	35	37	42	45	33	35	37	40		46.3
Ryan	Maximum	82	85	82	88	72	76	75	78	76	82	78	81	80	81	88	87	68	80	82	68	61	59	67	66	79	64	76	78	75	80		76.5
	Minimum																																
Spencer§	Maximum	78	86	81	89	75	69	72	72	78	80	80	75	70	76	85	78	61	72	81	54	59	62	73	72	87	63	64	72	71	71		73.5
	Minimum	56	51	51	54	60	57	49	48	46	46	50	52	47	44	53	54	57	55	59	48	40	32	24	40	49	54	31	31	40	38		47.2
Sutton	Maximum	83	83	82	88	88	72	72	72	67	80	80	78	72	72	82	82	77	70	80	80	57	60	68	68	76	76	58	60	66	72		74.0
	Minimum	52	51	61	60	61	57	52	55	47	49	62	62	56	52	56	63	56	54	52	48	41	36	34	38	40	48	34	38	40	46		50.0
Union§	Maximum																																
	Minimum								47	50	46	49	44	42	42	50	55	51	55	45	40	37	28	31	35	38	41	30	35	38	39		42.1
White Sulphur Spgs.	Maximum	86	80	88	83	80	70	70	64	76	77	75	72	75	71	75	84	80	73	75	70	55	64	65	75	75	70	75	72	75	78		74.3
	Minimum	55	54	55	60	65	54	58	52	55	45	50	55	45	44	45	55	60	60	55	46	44	32	34	31	44	40	32	31	35	45		47.9
Williamson§	Maximum	80	87	85	89	81	68	72	75	80	80	81	75	74	80	85	85	66	75	82	72	54	63	70	76	81	63	66	70	76	80		75.7
	Minimum	62	59	58	65	68	55	53	53	56	56	56	58	53	53	53	57	63	56	55	49	43	40	41	44	48	53	39	40	45	49		52.7

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY
NOV 27 1918

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

OCTOBER, 1918

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
NOVEMBER 25, 1918

Departure of the Mean Temperature from the Normal, October, 1918.



Shaded portions show excess (+). Unshaded portions show deficiency (−). Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVI. PARKERSBURG, W. VA., OCTOBER, 1918. No. 10

GENERAL SUMMARY.

October was warm, pleasant, and exceptionally favorable for late growth and farm work. While the rainfall averaged considerably above the normal, the month was dry in most sections until the 25th. Droughty conditions prevailed in a few localities, but at the close of the month winter grains were in excellent condition, with large acreage. Although killing frosts were general on the 22d, pastures and meadows continued green. The conditions were nearly perfect for the maturing and curing of corn.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.11 and 30.16 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.47 inches on the 15th, and 29.66 inches on the 30th. Elkins, 30.49 inches on the 4th, and 29.56 inches on the 30th.

TEMPERATURE.

The monthly mean for the State, 46 stations reporting, was 58.2°. The departure from the normal for 39 stations having ten or more years of record was +3.2°. During the first 15 days the temperature averaged only slightly above the normal, the weather being seasonally warm from the 2d to the 6th and the 10th to the 13th, while cool weather was the rule on the 7-9th and 14th-15th. With the exception of the 21st and 22d, when killing frosts were general, the weather was warm from the 15th to the 30th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 83 per cent; 8 p. m., 69 per cent. The October averages for the same hours for the past 29 years are 83 and 70 per cent, respectively. Elkins, 8 a. m., 88 per cent; 8 p. m., 72 per cent. The October averages for Elkins for the same hours for the past 18 years are 89 and 78 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 66 stations reporting, was 3.68 inches. The departure from the normal for 44 stations having ten or more years of record was +0.87 inch. The rainfall was heaviest over the southeastern counties and lightest over the eastern panhandle section. A trace of snow was observed at Parsons, Tucker County, and Pickens, Randolph County. Light to moderate rain occurred on the 6th, 12th, 20th, 25th,and 28th, and moderate to heavy rain on 29th, the 30th, and 31st.

HAIL.

Light hail occurred in sections of Mercer County on the 29th, and in McDowell and Putman Counties on the 31st. No damage resulted.

WIND.

The average wind velocity at Parkersburg was 4.3 miles per hour, or 0.6 mile below the October average for 28 years. The average at Elkins was 4.9 miles per hour, or 1.5 miles above the October average for 19 years. The highest velocity at Parkersburg was 26 miles per hour from the west on the 6th, and at Elkins 33 miles per hour from the northwest on the 30th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 57 per cent of the possible amount, or 7 per cent above the October average for 21 years. The average at Elkins was 51 per cent, or 4 per cent above the October average for 19 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 2d, 4th, 5th, 8th, 9th, 10th, 11th, 14th, 15th, 17th, and 18th; Burlington, 7th; Charleston, 14th and 15th; Creston, 3d, 4th, 8th, 10th, and 14th; Elkins, 4th, 8th, 10th, 15th, and 22d; Grafton, 10th, 11th, 13th, 16th, 17th, 18th, and 22d; Hinton, 10th; Mannington, 4th, 8th, 10th, 14th, and 21st; New Cumberland, 4th, 9th, 10th, 11th, 12th, 15th, 21st, 22d, 23d, 24th, and 27th; Parkersburg, 4th and 10th; Pickens, 7th and 13th; Point Pleasant, 4th; Robertsburg, 4th, 8th, 10th, 14th, and 15th; Romney, 9th, 10th, 11th, 16th, and 17th; St. Marys, 14th and 15th; Smithfield, 4th and 14th; Wellsburg, 8th.

Frost, killing: Parsons, 4th; Union, 8th; Moorefield, 9th; Green Sulphur Springs, 14th; Bens Run, Cuba, New Martinsville, Robertsburg, Romney, Sutton, Smithfield, Wellsburg, and Weston, 15th; Bancroft, Glenville, Grafton, Martinsburg, and Piedmont, 22d.

Hail: Bluefield, 29th; Gary and Robertsburg, 31st.

Halos, lunar: Elkins, 17th; Parkersburg, 23d; Pickens, 17th; Wheeling, 18th and 19th.

Smoke, dense: Lost Creek, 14th and 18th; New Cumberland and Parkersburg, 13th; Pickens, 18th and 19th.

Thunderstorms (dates and number of stations reporting): 3d, 1; 5th, 1; 6th, 6; 28th, 1; 29th, 4; 31st, 1.

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	51.5	95	21	1.97	2.91	T	....	..	..	..
1892	52.6	89	24	0.83	1.45	0.21	....	..	..	..
1893	54.1	86	16	4.74	7.22	1.00	....	21	6	4
1894	54.4	88	22	2.32	3.85	1.17	T	16	8	7
1895	48.1	89	8	1.29	2.25	0.16	T.	22	5	4
1896	51.0	82	20	2.08	4.37	0.45	T.	14	9	8
1897	58.2	95	22	0.53	2.27	0.07	....	18	7	6
1898	55.6	95	19	4.84	8.50	2.48	T.	11	10	10
1899	56.8	91	19	1.42	3.81	0.23	0	15	7	9
1900	60.9	97	24	2.33	4.80	1.15	0	16	8	7
1901	54.3	86	19	0.54	1.95	0.12	0	19	6	6
1902	56.5	87	17	2.63	5.50	0.90	T.	16	8	7
1903	54.2	96	15	2.55	4.75	0.80	T.	17	7	7
1904	54.5	92	16	1.59	3.02	0.37	T.	18	8	5
1905	54.2	95	19	4.71	8.26	2.46	T.	13	8	10
1906	54.5	86	12	3.09	8.15	1.64	1.3	11	6	14
1907	50.3	87	19	2.65	5.12	0.54	0.1	15	9	7
1908	55.1	91	16	1.60	6.88	0.33	T.	18	7	6
1909	50.0	88	14	2.79	5.27	0.60	0.1	16	7	8
1910	58.1	95	15	1.85	2.96	0.80	0.7	18	7	6
1911	56.3	88	23	5.28	9.65	3.27	0	12	7	12
1912	55.5	93	20	1.34	3.10	0.20	T.	18	7	6
1913	54.5	92	12	4.50	8.11	1.78	0.3	12	6	13
1914	57.3	91	14	2.94	6.72	1.37	T.	12	8	11
1915	56.6	89	20	4.11	5.55	0.74	T.	17	7	7
1916	54.1	97	16	2.38	4.35	0.91	T.	19	5	7
1917	49.2	89	16	4.35	6.49	1.18	5.5	15	6	10
1918	58.2	89	24	3.68	7.53	1.59	T.	15	7	9
Means and extremes ..	54.5	97	8	2.68	9.65	T.	0.3	16	7	8

Climatological Data for October, 1918.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard ††	Grant	2,700	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	2	56.8	.....	83	5†	24	22	49	2.40	.....	1.50	0	5	18	4	9	sw.	Elmer Keister.
Burlington	Mineral	875	24	55.4	+ 1.9	82	15	26	22	44	2.27	+0.07	0.77	0	5	14	13	4	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	29	.....	.....	.....	.....	.....	.....	.....	1.59	−1.25	0.70	0	5	.....	.....	.....	.....	S. W. Lightner.
Martinsburg	Berkeley	435	26	56.4	+ 2.0	84	17	32	22†	44	3.88	+1.29	.....	0	8	19	4	8	se.	G. W. Van Metre, C. E
Moorefield	Hardy	900	22	60.9	+ 6.2	89	6†	27	22†	52	2.26	+0.06	0.80	0	7	23	3	5	.....	M. S. Henkel.
Piedmont	Mineral	919	5	54.0	.....	78	5	29	22	35	2.80	.....	0 72	0	7	16	9	6	se.	C. A. Suter, Jr.
Romney	Hampshire	824	20	58.8	+ 4.0	89	17	26	22	50	2.44	+0.05	0.80	0	6	17	7	7	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	19	57.5	+ 1.9	86	17	25	22†	55	1.70	−0.58	0.80	0	5	13	1	12	w.	J. M. Mallow.
Wardensville	Hardy	1,200	0	56.4[a]	.....	84[a]	18	25	22	54[a]	2.65	.....	0.97	0	6	18	7	6	nw.	Luther F. Sutton.
Averages and	extremes	.....	....	57.0	+ 3.2	89	6†	24	22	55	2.44	−0.09	1.50	0	6	18	6	7	w.	
Northern Division.																				
Bens Run	Pleasants	622	16	60.2	+ 3.9	83	5	34	15	37	3.15	+0.19	0.92	0	10	22	1	8	.....	J. D. Riggs.
Brandonville	Preston	1,809	7	.....	.....	.....	.....	.....	.....	.....	2.75	.....	.....	0	4	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	21	57.5	+ 4.4	79	9	29	15	45	3.77	+0.52	1.40	0	9	15	7	9	.....	H. A. Darnall.
Cortland	Tucker	3,300	2	.....	.....	.....	.....	.....	.....	.....	3.76	.....	0.81	0	6	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	16	60.4	+ 5.1	87	6	32	15†	45	3.18	+0.49	0.85	0	10	17	1	13	sw.	J. M. Reed.
Davis	Tucker	3,093	9	.....	.....	.....	.....	.....	.....	.....	3.04	.....	0.80	0	7	16	7	8	.....	Ross C. Male.
Elizabeth	Wirt	646	6	.....	.....	.....	.....	.....	.....	.....	4.16	.....	1.00	0	10	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	17	55.2	+ 3.8	79	17	27	22	44	3 40	+0.98	1.17	0	9	6	8	17	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	12	57.5	+ 2.4	83	2	31	15†	48	4.04	+1.45	1.59	0	14	19	3	9	w.	F. P. Hall.
Glenville	Gilmer	738	24	61.0	+ 5.6	87	2	30	22	50	3.60	+0.70	1.18	0	9	19	6	6	w.	Howard R. Brannon.
Grafton	Taylor	1,000	25	58.6	+ 3.4	84	2	28	22	46	3.49	+0.69	1.49	0	6	10	15	6	ne.	W. C. Byers.
Lost Creek	Harrison	1,026	20	57.0	+ 2.6	82	17	26	15	48	3.13	+0.61	1.32	0	6	17	5	9	w.	Allen Smith.
Mannington	Marion	974	15	57.6	+ 2.1	82	17	27	22	48	3.52	+0.85	1.22	0	13	15	4	12	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. W. Muldoon.
Moundsville	Marshall	642	15	.....	.....	.....	.....	.....	.....	.....	2.87	+0.03	0.70	0	6	11	7	13	ne.	M. Z. White.
New Cumberland	Hancock	987	20	55.9	+ 1.7	80	2	26	22	40	2.86	+0.14	0.78	0	9	14	14	3	sw.	M. F. Smith.
New Martinsville	Wetzel	634	24	60.0	+ 3.2	82	5	32	15†	41	3.90	+1.31	1.00	0	10	19	3	9	s.	Wm. Ankrom.
Parkersburg	Wood	638	31	59.2	+ 4.6	83	5	34	15	36	3.19	+0.75	1.10	0	11	11	8	12	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	18	55.8	+ 3.2	82	17	25	14†	51	1.99	−0.75	0.57	T.	5	15	4	12	.....	J. W. Swisher.
Philippi	Barbour	1,149	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Attie G. Robinson.
Pickens	Randolph	2,697	15	55 8	+ 3.6	82	17	26	15	44	5.59	+1.81	1.10	T.	7	15	7	9	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	31	.....	.....	.....	.....	.....	.....	.....	3.38	+0.50	0.93	0	11	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	9	.....	.....	.....	.....	.....	.....	.....	4.13	+0.67	0.92	0	13	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	12	55.0	+ 1.5	83	5	28	22	47	3.66	+0.31	1.05	0	14	20	6	5	sw.	G. M. Whisler.
Terra Alta	Preston	2,612	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. F. Wilhelm.
Wellsburg	Brooke	1,225	17	55.9	+ 2.4	79	2†	27	22	39	3.36	+0.60	1.05	0	9	15	12	4	w.	George P. Pfister.
Weston	Lewis	1,026	22	59.8	+ 4.9	83	2†	30	15	43	3.65	+0.67	1.70	0	8	14	9	8	.....	Weston State Hospital.
Wheeling	Ohio	645	31	57.6	+ 2.7	85	2	32	15†	44	3.16	+0.74	0.75	0	11	19	6	6	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	57.8	+ 3.4	87	2†	25	14†	51	3.47	+0.63	1.70	T.	9	15	7	9	w.	
Southern Division.																				
Bancroft	Putnam	574	13	58.3	+ 0.9	85	5	30	22	43	3.99	+1.10	0.90	0	10	18	0	13	ne.	R. E. Dent.
Beckley	Raleigh	2,440	17	57.4	+ 3.0	85	2†	29	15	48	2.45	+0.06	1.35	0	4	19	6	6	w.	John A. Ewart.
Bluefield	Mercer	2,558	22	60.0	+ 4.4	83	17	32	15	41	4.25	+1.57	1.90	0	10	11	12	7	.....	Norfolk & Western Ry.
Breading[c]	Mingo	507	0	61.4	.....	86	6	31	15	48	4.58	.....	2.56	0	9	11	9	8	.....	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	2	.....	.....	.....	.....	.....	.....	.....	7.44	.....	2.00	0	8	19	0	12	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	14	62.0	+ 3.6	88	6	33	22	46	4.88	+2.22	1.60	0	9	10	4	17	e.	C. V. Lewis.
Clay	Clay	706	1	.....	.....	.....	.....	.....	.....	.....	3.15	.....	0.85	0	9	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	15	60.0	+ 4.8	86	5	30	15	51	3.51	+0.67	1.05	0	8	13	13	5	w,	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	1	.....	.....	.....	.....	.....	.....	.....	3.16	.....	0.88	0	11	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	1	.....	.....	.....	.....	.....	.....	.....	3.66	.....	0.95	0	10	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	2	.....	.....	.....	.....	.....	.....	.....	3.41	.....	1.00	0	10	.....	.....	.....	.....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	1	.....	.....	.....	.....	.....	.....	.....	3.50	.....	1.20	0	8	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans	Jackson	606	5	60.4	.....	83	5	34	22	34	4.09	.....	0.97	0	7	7	0	15	.....	B. F. Sayre.
Gary	McDowell	1,426	1	.....	.....	.....	.....	.....	.....	.....	4.99	.....	1.30	0	10	19	9	3	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	21	56.3	+ 1.7	74	2†	27	14	39	7.53	+5.55	2.35	0	7	16	6	9	w.	W. H. Gwinn.
Hinton	..do	1,450	20	58.0	+ 1.5	81	5†	35	15†	45	6.02	+3.62	1.43	0	8	13	4	14	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	5	55.9	.....	84	17	27	15	51	4.95	.....	1.18	0	10	13	8	10	.....	R. C. Ferguson.
Huntington	Cabell	538	23	58.6	+ 2.5	82	5	36	15	37	2.86	+0.49	1.06	0	7	10	2	19	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	1	.....	.....	.....	.....	.....	.....	.....	3.27	.....	1.03	0	8	.....	.....	.....	.....	CabinCreek Con.Coal Co.
Lewisburg	Greenbrier	2,200	17	56.6	+ 3.3	81	17	26	15	47	4.99	+2.35	1.65	0	7	19	3	9	s.	Geo. T. Argabate.
Logan	Logan	687	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton ††	Pocahontas	2,131	18	50.0	− 0.4	76	5	20	15	44	4.64	+1.78	1.78	0	9	7	14	10	sw.	S. L. Brown.
Nuttallburg	Fayette	2,252	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	24	61.0	+ 3.7	87	5†	33	22	43	3.78	+1.28	1.12	0	8	13	11	7	sw.	W. D. Holmes.
Powellton	Fayette	933	21	61.6	+ 6.2	82[a]	2†	34[d]	15	38[d]	3.10	+0.98	1.25	0	9	7	13	11	e.	J. F. Campbell.
Raleigh	Raleigh	2,130	1	.....	.....	.....	.....	.....	.....	.....	4.29	.....	1.47	0	7	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	1	.....	.....	.....	.....	.....	.....	.....	5.07	.....	2.00	0	5	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	17	58.9	+ 1.7	87	5	31	22†	48	3.01	+0.66	0.80	0	9	4	11	16	.....	E. C. Brace, Jr.
Ryan	Roane	700	14	.....	.....	88	6	.....	.....	.....	3.84	+0.70	1.30	0	10	19	5	7	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	1	.....	.....	.....	.....	.....	.....	.....	4.29	.....	0.90	0	9	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	13	59.4	+ 4.6	85	2	30	15	44	3.72	+0.80	0.86	0	8	4	14	13	.....	A. M. McKown.
Sutton	Braxton	839	11	58.8	+ 1.3	87	7†	31	15†	44	3.63	+0.50	1.40	0	7	24	3	4	.....	C. B. Eakle.
Union	Monroe	2,250	13	56.6	+ 3.2	81	2†	25	15	50	4.54	+1.83	2.00	0	4	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	7	57.6	.....	85	5	25	15	51	4.65	.....	1.60	0	5	25	2	4	.....	J. M. Ayres.
Williamson	Mingo	660	17	61.0	+ 2.6	84	2†	37	15	39	3.69	+1.16	1.20	0	7	19	3	9	w.	J. F. Keyser.
Averages and	extremes	.....	....	59.0	+ 3.1	88	6	20	15	51	4.20	+1.50	2.56	0	8	14	7	10	w.	
State averages and	extremes	.....	....	58.2	+ 3.2	89	6†	20	15	55	3.68	+0.87	2.56	T.	8	15	7	9	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

z Approximated by the observer.

Daily Precipitation for October, 1918.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac						.10						.20								.18					*	.42		T.	T.	*	1.50	2.40
Brandywine	do						.77														.31					.20	T.			.60	.39		2.27
Harpers Ferry	do						.15							.30													.28				.16	.70	1.59
Martinsburg	do						1.16						.10								.26					.30	.14			*	1.87	.05	3.88
Moorefield	do						.10						.31													.20	.13			.05	.67	.80	2.26
Piedmont	do	T.					.62						.13								.41					.63	.08		T.	T.	.72	.21	2.80
Romney	do						.46						.20								.30					.35		T.	.33		.80	T.	2.44
Upper Tract	do												.30								.15					.25					.20	.80	1.70
Wardensville	do						.12	T.						.25	T.												.28	.13			.90	.97	2.65
Northern Division.																																	
Bens Run	Ohio						.39						.20	.02							.60	.06				.45			.29	.04	.92	.18	3.15
Brandonville	Monongahela																				.45					.30					*	2.00	2.75
Buckhannon	do	T.					.35						.50	T.							.60					.40	.10	.05	T.	.12	1.40	.25	3.77
Central Station	Middle Is. Creek																																
Cortland	Monongahela						.55							.36								.65					.69				.70	.81	3.76
Creston	Little Kanawha	T					.05						.40	.10							.40	.30				.25	.06			.35	.42	.85	3.18
Davis	Monongahela	T.					.43							.51	.02							.45					.15				.68	.80	3.04
Elizabeth	Little Kanawha						.25						.40	.05							.56	.06				.48	.03			.44	.89	1.00	4.16
Elkins ***	Monongahela		T.	T.			.21	T.					.55	.01							.45					.35	T.		.01	.21	1.07	.54	3.40
Fairmont	do	.03		.03			.59		T.				.04	.12	.12						.35	.26				.06	.12	.01		.40	.32	1.59	4.04
Glenville	Little Kanawha						.32						.48	.12							.54	.18				.22				.40	.16	1.18	3.60
Grafton	Monongahela						.82						.32								.56					.15			.15		1.49		3.49
Lost Creek	do						.21						.40	T.							.61					.15	T.	T.	.44	T.	1.32	T.	3.13
Mannington	do	.05		.03			.76						.15		.09						.52	.11				.19	.01		.06	.04	1.22	.29	3.52
Morgantown	do																																
Moundsville	Ohio						.70						.15									.65				.35				.35	.67		2.87
New Cumberland	do						.59						.17								.36					.42	.21		.10	.06	.78	.17	2.86
New Martinsville	do	.05					1.00						.10								.65	.10				.45	.05		.30		1.00	.20	3.90
Parkersburg ***	Ohio	.01					.16	T.				.01	.16	T							.57				.03	.33		T.	.57	.17	.94	.24	3.19
Parsons	Monongahela			T.				.42					.10									.57					T.				.40	.50	1.99
Philippi	do																																
Pickens	do			T.			.64	T.					.74								1.00					.43			T.	.91	1.10	.77	5.59
Rowlesburg	do	.02					.93	.04					T.	.23	.08						T.	.72				.04	.15			.03	.72	.42	3.38
Saint Marys	Ohio	.05					.50		.50				.10		.05						.52	.10				.10	.50	.04		.45	.30	.92	4.13
Smithfield	Fishing Creek	.05		.02			.53						.05	.15	.05						.53	.22				.37	.03	.01		.30	.30	1.05	3.66
Terra Alta	Monongahela																																
Wellsburg	Ohio						1.05						.25								.56	.07				.17	.16		.22		.77	.11	3.36
Weston	Monongahela	.05					.20						.55								.60					.25				.80	.90	.30	3.65
Wheeling	Ohio	.06		T.			.75						.20	.05							.30	.32				.12	.24			.25	.15	.72	3.16
Southern Division.																																	
Bancroft	Great Kanawha			.12			.10						.30								.90	.14				.40	.08		.53		.52	.90	3.99
Beckley	do																				T.					.55				.27	1.35	.28	2.45
Bluefield	do											.36									1.05	.10				1.90	.20	.05	.03	.38	.36	.18	4.61
Breading	do						.08						.13								.74				.01	.45			.46	.05	2.56	.10	4.58
Camden-on-Gauley	do						.22						.60								1.00					1.80			.22	2.00	1.00	.60	7.44
Charleston	do			.40			T.						.40	.10							.50	.20				.30				68	.70	1.60	4.88
Clay	do						.25						.17	.22							.40	.28				.15				.18	.65	.85	3.15
Cuba	Sand Creek						.03						.50								.41				T.	.50			.34	.26	1.05	.42	3.51
Dam 19 O. R.	Ohio						.15						.11	.07							.30	.42				.34	10		.03	.45	.31	.88	3.16
Dam 20 O. R.	do												.35	.10							.48	.32				.24	.08		.10	.52	.52	.95	3.66
Dam 22 O. R.	do												.35	.10							.18	.32				.24	.08		.10	.52	.52	1.00	3.41
Dam 26 O. R.	do						.09						.40	.13							.11	.33				.24					1.00	1.20	3.50
Elkhorn	Big Sandy																																
Evans	Ohio												.82								.68					.37			.40	.39	.97	.46	4.09
Gary	Big Sandy												.10							.40	.70				.60	.75	.10		.09	1.30	.70	.25	4.99
Green Sulpr. Spgs.	Great Kanawha						.23						.25								1.10					1.05				2.10	2.35	.45	7.53
Hinton	do													.06							.44	.76				.88	1.48	.06			1.30	1.04	6.02
Holcomb	do						.40	.04					.22								*	.84				*	.95			*	*	2.50	4.95
Huntington	Ohio						.14						.58	T.							.52	T.				.34	T.	T.	.08	.14	T.	1.06	2.86
Kaylord	Great Kanawha						.16							.04							.42	.50				.20	T.			.17	.75	1.03	3.27
Lewisburg	do												.14						T.		.93					1.65	.21			.16	1.65	.20	4.99
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do						.20						.18	T.												1.60	.42	.06	.04	.26	1.78	.10	4.64
Nuttallburg	do																																
Point Pleasant	Ohio												.45		.02						.53	.66				.36			.30		1.12	.34	3.78
Powellton							.20						.05								.73	.10				.21		.03	.15		1.25	.38	3.10
Raleigh	Great Kanawha																									1.47	.73	.06	.13	.04	1.18	.68	4.29
Renick	do													.13								.94					2.00				1.05	.95	5.07
Robertsburg	do						.02						.30								.40	.27				.36	.10			.33	.43	.80	3.01
Ryan	do								.10				.63								.75	.01			.01	.38			.46	.08	1.30	.12	3.84
Sissonville	do												.41	.60	T.						.64	.20				.30	.21		.51	T.	.52	.90	4.29
Spencer	Little Kanawha			T.									.47	.40							.68	.05				.38	T.			.43	.45	.86	3.72
Sutton	Great Kanawha						.28						.68								.74					.15			.06		1.40	.32	3.63
Union	do																				1.10					2.00					.62	.82	4.54
White Sulphur Spgs.	do												.10								1.10					1.60	.30				1.55		4.65
Williamson	Big Sandy																				.76	.15				.41	.15	T.	T.	.30	1.20	.72	3.69

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‡‡ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for October, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum																																
	Minimum																																
Brandywine	Maximum	74	78	76	78	83	79	70	69	74	72	77	73	78	67	71	81	83	75	68	60	61	64	70	68	64	68	70	70	71	70	68	71.9
	Minimum	45	46	47	35	46	47	49	30	30	34	35	50	48	38	27	37	34	44	28	37	40	24	27	28	58	57	55	62	60	57	42	41.8
Burlington	Maximum	63	75	71	70	79	78	64	69	70	75	77	60	65	78	82	81	74	62	62	61	62	58	63	69	64	68	77	75	68	68	59	69.3
	Minimum	45	43	50	40	44	56	32	30	37	37	51	41	29	36	38	44	41	29	28	36	41	26	28	30	56	53	53	64	49	58	42	41.5
Martinsburg§	Maximum	64	76	74	69	79	81	61	65	65	71	75	69	79	62	65	81	84	63	65	62	62	59	63	69	61	65	70	74	74	69	59	68.9
	Minimum	41	45	50	42	42	47	54	36	35	35	40	42	55	49	36	37	41	56	36	38	49	32	32	32	37	54	55	60	54	56	40	43.8
Moorfield	Maximum	70	86	88	80	86	89	79	73	77	80	82	77	82	68	73	89	87	81	64	65	66	67	69	74	68	70	72	77	74	72	65	75.8
	Minimum	48	44	52	40	46	61	53	35	30	37	46	52	52	43	50	38	35	46	28	47	48	27	27	30	61	58	58	65	57	64	47	46.0
Piedmont	Maximum	65	73	71	74	78	76	66	54	62	57	65	66	68	56	56	66	65	57	53	59	60	45	59	64	60	66	67	72	65	64	64	63.6
	Minimum	40	45	51	39	44	51	50	36	33	40	42	53	56	34	40	40	42	48	33	40	45	29	31	32	56	55	56	61	53	59	43	44.4
Romney	Maximum	70	80	76	80	84	83	80	70	73	76	81	80	81	72	73	84	89	75	68	64	66	66	67	75	72	75	77	74	70	72	59	74.6
	Minimum	45	44	52	56	40	52	50	43	29	35	36	52	52	50	30	36	39	35	29	40	45	26	28	30	55	56	60	52	46	48	46	43.1
Upper Tract	Maximum	81	82	83	76	78	79	78	78	79	78	77	74	75	82	82	84	86	83	80	73	75	76	77	74	70	70	71	72	72	69	76.9	
	Minimum	44	45	45	38	39	38	32	30	32	32	38	50	44	27	32	34	38	38	28	27	28	25	25	29	34	40	55	56	57	56	45	38.1
Wardensville	Maximum	73	82	74	76	83	80	72	74	76	74	72	76	70	62	78	82	80	84	74	64	70	72	68	71	64	65	74	75	73	71		73.6
	Minimum	35	40	42	37	39	45	47	30	28	30	36	40	44	45	28	28	32	30	29	36	50	30	25	28	31	58	54	53	58	60	45	39.1
Northern Division.																																	
Bens Run	Maximum	73	82	76	77	83	79	63	75	75	76	79	71	68	62	70	77	79	65	75	63	67	71	73	74	69	77	82	72	65	63	57	72.2
	Minimum	42	53	55	46	48	61	50	38	52	55	44	58	55	43	34	40	42	49	42	52	47	35	41	46	59	56	54	53	52	55	41	48.3
Buckhannon	Maximum	67	78	72	71	78	76	68	68	79	70	73	64	68	60	65	73	74	61	71	60	59	64	70	70	67	74	74	74	63	66	67	69.2
	Minimum	48	50	55	39	46	64	47	32	34	37	39	54	58	42	29	35	37	44	41	45	49	30	46	38	58	55	56	59	53	57	44	45.8
Creston	Maximum	79	85	80	79	84	87	69	77	77	77	79	70	69	66	72	79	77	68	74	66	63	77	74	73	70	75	79	73	66	62	64	73.9
	Minimum	49	52	54	43	48	65	51	35	41	47	40	56	53	39	32	36	38	45	34	53	45	32	40	44	59	56	57	58	55	55	43	46.9
Elkins	Maximum	69	78	67	73	78	75	54	72	69	74	72	64	67	53	69	75	79	65	66	58	57	66	70	68	64	71	69	72	68	70	52	67.9
	Minimum	48	50	44	39	43	54	40	33	31	37	36	51	42	36	28	33	35	43	41	50	33	27	32	36	59	61	61	53	50	50	38	42.4
Fairmont§	Maximum	73	83	75	76	75	80	54	76	77	78	78	64	66	60	68	79	82	61	77	58	62	71	74	78	69	78	76	75	65	64	54	71.2
	Minimum	41	41	56	44	45	52	50	37	37	39	42	43	58	41	31	31	38	40	39	39	43	32	32	37	41	54	55	63	54	55	48	43.8
Glenville	Maximum	83	87	84	82	86	84	83	78	80	80	82	82	70	70	75	81	83	68	79	76	69	76	79	77	73	78	80	75	68	65	62	77.3
	Minimum	47	50	50	42	44	64	50	36	35	39	36	53	49	37	31	31	34	41	33	48	50	30	35	38	57	52	57	59	55	57	48	44.8
Grafton	Maximum	71	84	76	74	83	81	66	77	76	71	77	69	66	63	70	78	82	76	72	67	61	68	72	74	69	77	76	80	66	63	56	72.3
	Minimum	43	50	53	42	45	61	48	35	35	39	38	53	54	40	30	35	36	42	39	44	44	28	34	39	59	54	58	59	53	56	42	44.8
Lost Creek	Maximum	78	80	76	75	80	81	75	76	77	76	79	64	64	61	69	75	82	76	77	69	69	68	71	70	68	77	74	72	62	63	60	72.4
	Minimum	44	46	53	39	38	40	39	31	33	35	39	53	54	38	26	33	34	36	36	45	32	27	34	36	57	52	54	57	51	58	44	41.7
Mannington	Maximum	67	80	77	72	80	79	70	70	73	73	78	75	66	64	60	72	82	78	75	69	61	69	72	70	68	77	75	73	66	63	60	71.4
	Minimum	36	51	52	39	44	63	49	33	35	39	37	60	58	38	28	32	34	40	36	46	41	27	34	36	54	51	54	57	53	58	47	43.9
Morgantown	Maximum																																
	Minimum																																
New Cumberland	Maximum	63	80	73	70	79	76	57	70	75	73	78	67	72	57	67	59	79	64	66	59	63	61	71	67	63	76	74	69	68	62	55	68.2
	Minimum	29	46	52	36	49	56	44	30	37	38	40	55	53	42	32	46	41	48	34	49	36	26	32	38	58	58	49	53	46	53	44	43.6
New Martinsville	Maximum	71	81	77	79	82	79	70	77	78	78	79	73	70	62	72	78	80	75	76	70	65	72	75	72	68	77	80	75	67	63	59	73.5
	Minimum	40	50	56	45	47	62	50	39	39	44	42	57	52	40	32	37	40	45	39	51	44	32	38	44	58	55	53	58	50	55	48	46.5
Parkersburg	Maximum	68	81	72	75	83	78	55	71	73	75	77	70	69	58	68	78	78	60	70	62	61	68	72	72	69	75	77	72	64	60	55	69.9
	Minimum	44	56	55	46	53	54	46	39	48	44	45	58	50	44	31	42	41	50	45	52	45	38	46	51	60	57	59	53	52	54	43	48.6
Parsons	Maximum	72	79	60	78	79	79	62	74	73	79	77	61	65	70	58	77	82	68	71	68	67	70	61	74	72	65	76	76	75	67	73	71.2
	Minimum	46	44	36	30	38	49	39	36	28	38	32	49	56	25	38	30	31	39	30	39	57	25	39	29	32	57	52	55	58	48	52	40.5
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum	68	78	79	75	79	74	62	73	70	75	76	61	64	55	70	75	82	65	70	57	57	57	72	72	60	70	68	69	64	68	59	68.5
	Minimum	45	46	49	39	45	58	43	30	45	39	43	54	53	35	26	41	42	45	41	42	40	28	28	39	52	57	59	49	46	46	35	43.2
Terra Alta	Maximum																																
	Minimum																																
Wellsburg	Maximum	65	79	76	72	79	76	63	70	72	77	76	71	70	59	63	75	76	65	67	62	60	61	69	68	66	75	74	70	67	67	56	69.2
	Minimum	32	44	53	37	43	60	47	34	35	39	40	54	48	39	28	36	39	42	30	51	39	27	33	36	53	54	49	54	46	54	45	42.6
Weston	Maximum	73	83	81	77	83	80	76	73	75	76	77	65	66	62	69	78	82	74	76	64	63	69	75	74	69	76	75	76	74	64	60	73.1
	Minimum	46	51	52	41	48	62	49	34	38	39	39	55	56	41	30	37	39	44	36	46	46	49	37	40	58	54	58	56	54	58	45	46.4
Wheeling§	Maximum	72	85	78	79	83	81	59	72	79	79	82	65	75	64	68	60	84	60	70	75	68	68	68	70	65	80	76	69	70	59	59	71.7
	Minimum	39	42	51	45	44	59	50	40	39	42	42	42	51	40	32	35	40	40	37	39	42	32	32	37	43	55	53	54	51	52	46	43.4
Southern Division.																																	
Beckley	Maximum	84	85	85	76	78	79	79	72	73	74	75	73	68	78	71	78	77	71	72	54	68	77	76	77	75	77	79	77	78	75	75	75.4
	Minimum	40	41	42	38	58	60	35	36	36	39	39	45	48	39	29	30	31	32	33	31	42	35	36	38	34	39	44	43	42	40	43	39.3
Bluefield	Maximum	75	80	76	76	78	77	75	68	70	75	75	74	70	76	72	80	83	76	75	65	65	65	67	66	64	67	67	75	65	70	58	71.8
	Minimum	43	48	51	44	55	60	47	39	39	41	45	50	58	41	32	39	43	54	52	43	50	39	42	48	50	59	60	61	60	55	43	48.1
Charleston	Maximum	85	84	83	82	82	88	85	80	79	82	79	78	74	69	74	80	76	76	74	72	67	74	76	82	80	78	83	74	70	67	69	77.5
	Minimum	42	46	52	50	51	50	42	40	39	40	41	43	57	42	39	34	38	39	45	50	54	33	35	45	49	52	60	66	58	57	48	46.4
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum	72	74	71	70	70	69	71	70	69	70	68	69	67	66	69	71	73	74	73	64	60	68	70	74	66	63	69	72	70	70	66	69.3
	Minimum	45	44	44	40	56	49	48	46	45	44	42	38	36	27	34	34	37	37	39	55	39	38	36	40	49	51	52	43	48	59	48	43.3
Hinton §	Maximum	75	77	78	75	81	81	58	67	72	75	77	69	79	59	67	79	81	72	69	57	64	61	67	79	61	67	70	76	66	71	57	70.5
	Minimum	48	48	48	48	47	50	52	39	37	38	40	42	57	42	35	35	36	40	44	44	49	35	35	37	44	58	59	60	59	58	50	45.6
Holcomb §.	Maximum	76	80	72	78	79	81	50	70	72	76	78	76	73	57	75	78	84	69	66	67	62	70	78	68	63	68	70	73	68	74	53	71.1
	Minimum	37	44	46	36	38	42	45	33	33	34	37	39	39	34	27	28	33	36	42	40	43	28	28	36	55	57	57	58	58	55	45	40.7
Huntington §	Maximum	68	80	73	75	82	81	57	70	73	72	77	72	71	60	66	74	75	63	55	63	62	67	73	73	70	74	79	66	64	60	54	69.3
	Minimum	45	50	55	45	45	60	51	41	41	45	45	46	58	45	36	38	40	43	45	45	50	38	39	50	53	57	57	60	54	55	50	47.8
Lewisburg	Maximum	71	78	72	74	79	79	72	68	71	74	75	65	76	65	69	79	81	71	64	55	63	64	68	68	61	65	66	73	66	69	61	69.7
	Minimum	46	41	44	36	44	54	48	31	29	34	38	51	57	38	26	32	37	48	38	46	46	29	31	39	56	57	59	55	55	57	45	43.5
Marlinton	Maximum	64	70	64	68	76	70	56	60	66	70	68	60	58	54	64	70	72	64	60	56	54	56	54	58	60	62	64	64	62	54	62.5	
	Minimum	44	42	44	38	42	44	42	32	28	32	34	44	44	36	20	26	32	34	28	40	32	22	24	36	52	26	42	54	54	52	40	37.4
Point Pleasant	Maximum	72	86	78	81	87	87	85	76	79	80	80	77	72	60	77	80	81	78	68	73	72	72	76	74	72	76	80	76	65	65	66	75.8
	Minimum	48	53	54	43	50	66	50	35	42	40	41	58	50	42	39	37	39	46	42	39	47	33	43	49	51	58	50	40	50	53	46	46.2
Powellton	Maximum	74	82	73	80	82	81	80	69	71	74	77	74	77	70	68	76	79	73	70		63	66	72	75	70	75	75	74	67	68	59	73.1
	Minimum	49	52	54	44	51	63	51	41	43	43	44	56	59	41	34	38	41	50	47					50	59	58	63	62	56	57	47	50.1
Robertsburg§	Maximum	74	86	77	83	87	83	58	78	77	81	80	73	72	62	73	80	81	62	73	63	70	76	71	76	71	76	83	68	67	61	70	73.9
	Minimum	41	42	45	43	46	56	51	35	36	40	42	43	51	38	32	32	39	45	32	40	50	31	31	41	54	55	55	57	53	56	49	43.9
Ryan	Maximum	79	81	82	85	86	88	72	78	76	77	80	72	70	68	72	76	74	74	76	70	74	79	78	79	71	78	79	70	70	65	65	75.6
	Minimum																																
Spencer§	Maximum	70	85	75	78	82	82	55	74	75	72	78	71	69	62	71	74	76	76	79	69	70	74	75	75	77	77	78	71	68	62	57	72.8
	Minimum	38	51	57	41	48	52	50	34	34	39	39	41	54	38	30	37	37	42	42	44	48	44	31	54	54	59	59	68	56	58	50	46.1
Sutton	Maximum	72	76	76	78	82	87	87	68	68	67	77	77	70	70	68	78	80	80	68	68	65	71	72	72	72	75	75	70	68	68	62	73.1
	Minimum	40	48	50	42	45	44	48	38	39	46	52	52	50	40	31	46	36	46	39	45	46	31	36	38	48	52	53	55	52	56	33	44.4
Union §	Maximum	80	81	78	77	81	80	70	67	74	77	78	78	79	77	70	80	80	79	79	66	67	67	65	65	67	75	73	72	73	68	73	73.8
	Minimum	38	37	44	34	45	47	49	30	30	35	34	35	36	34	25	30	35	34	33	31	32	32	31	39	55	50	55	55	54	56	46	39.4
White Sulphur Spgs.	Maximum	75	82	82	78	85	80	75	68	72	78	78	78	78	67	72	78	78	76	78	78	67	67	67	68	62	65	68	70	68	75	68	73.6
	Minimum	45	45	45	45	45	45	45	42	28	35	38	35	45	50	25	27	38	40	45	42	50	26	28	32	56	52	54	55	54	45	35	41.7
Williamson §	Maximum	80	84	78	78	84	84	58	76	74	78	78	69	78	63	72	78	74	66	73	58	65	75	75	74	72	71	78	72	63	60	58	72.5
	Minimum	49	49	54	51	51	53	53	42	43	45	47	47	60	44	37	39	40	44	49	52	54	40	42	49	55	59	59	63	57	55	50	49.4

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches
6 to 8 inches.
Over 8 inches.

/WE

UNIVERSITY ILLINOIS LIBRARY

DEC 1 1918

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

November

DECEMBER, 1918

BY

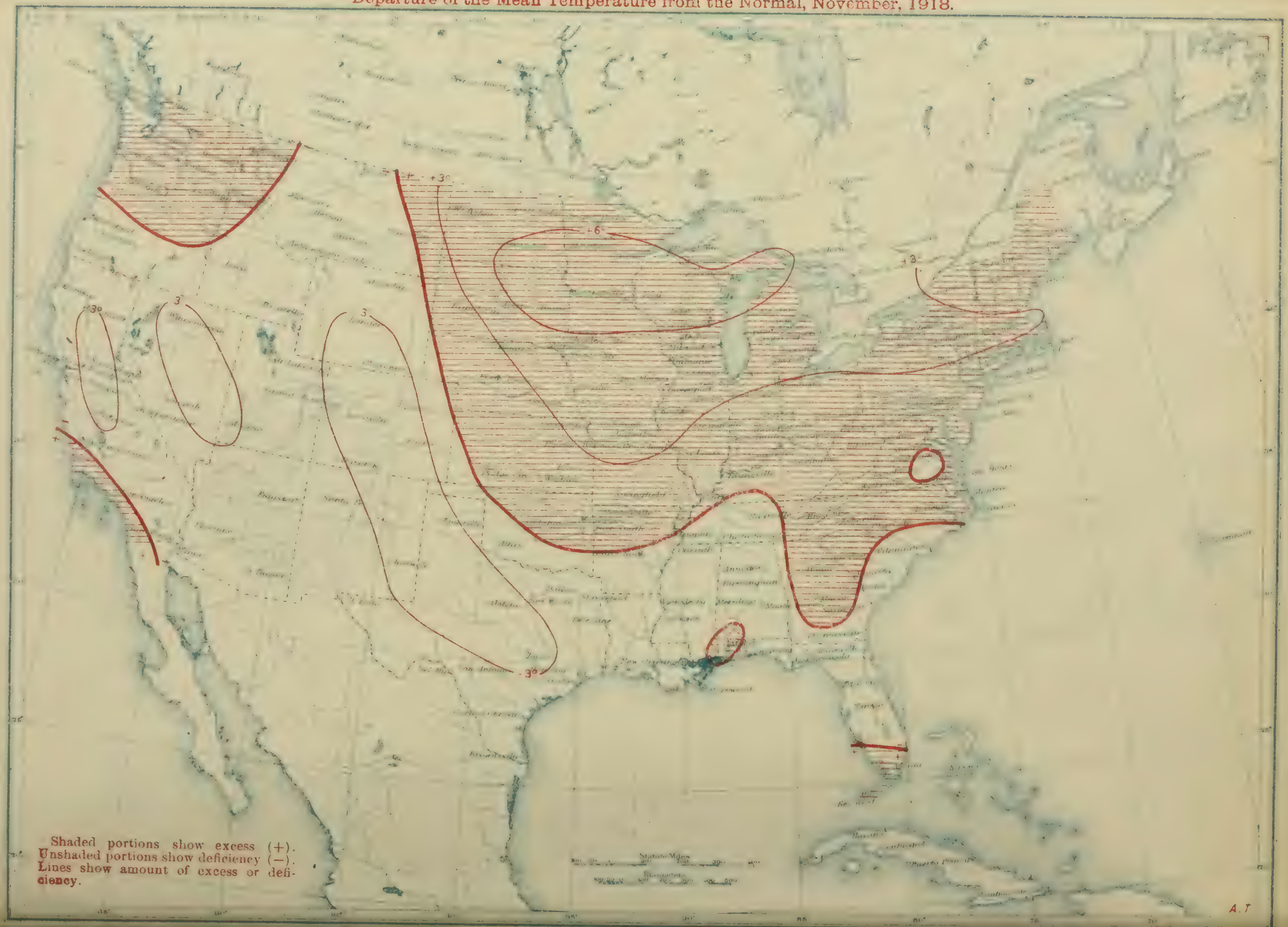
HENRY C. HOWE

METEOROLOGIST



PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
DECEMBER 24, 1918

Departure of the Mean Temperature from the Normal, November, 1918.



A. T

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVI. PARKERSBURG, W. VA., NOVEMBER, 1918. No. 11

GENERAL SUMMARY.

The month was considerably drier and slightly warmer than usual, without marked extremes in temperature. Exceptionally pleasant weather prevailed the first fifteen days, when cloudiness set in and continued until the 25th. Although the rainfall was light and unimportant until near the close of the second decade, there was sufficient moisture for growth, owing to heavy rains at the close of October. Apples were marketed without loss from freezing, pastures continued in good condition, and the stand of winter grains was good at the close of the month.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.12 and 30.15 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.47 inches on the 11th, and 29.39 inches on the 28th. Elkins, 30.54 inches on the 6th, and 29.43 inches on the 18th.

TEMPERATURE.

The monthly mean for the State, 46 stations reporting, was 42.9°. The departure from the normal for 40 stations having ten or more years of record was +0.2°. The month opened cool and the temperature was also generally slightly or somewhat below the normal from the 10th to the 14th and the 19th to the 27th, with the lowest readings generally on the 12th and 26th. Seasonally warm weather prevailed from the 6th to the 9th, 15th to the 18th, and from the 27th to the 29th, with the highest temperatures generally on the 8th, 17th, and 28th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 81 per cent; 8 p. m., 69 per cent. The November averages for the same hours for the past 30 years are 81 and 72 per cent, respectively. Elkins, 8 a. m., 81 per cent; 8 p. m., 76 per cent. The November averages for Elkins for the same hours for the past 18 years are 84 and 73 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 63 stations reporting, was 1.89 inches. The departure from the normal for 44 stations having ten or more years of record was —0.55 inch. There were light showers on the 9-10th and light to moderate rain daily from the 17th to the 21st. Moderate rain also fell on the 28th. In many of the more elevated districts snow flurries or light snow occurred on the 1st and daily from the 19th to the 21st. A fall of 7 inches occurred at Pickens, Randolph County.

WIND.

The average wind velocity at Parkersburg was 5.2 miles per hour, or 0.8 mile below the November average for 28 years. The average at Elkins was 5.7 miles per hour, or 1.4 miles above the November average for 19 years. The highest velocity at Parkersburg was 26 miles per hour from the southwest on the 29th, and at Elkins 26 miles per hour from the west on the 17th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 38 per cent of the possible amount, or 4 per cent above the November average for 21 years. The average at Elkins was 44 per cent, or 5 per cent above the November average for 19 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 5th, 6th, 7th, 8th, 10th, 12th, and 13th; Burlington, 28th; Charleston, 5th, 6th, 7th, 12th, 13th, 14th, 15th, and 16th; Creston, 5th; Dam No. 26(Hogsett, W. Va.), 5th, 6th, 7th, 12th, and 13th; Elkins, 3d, 6th, 7th, 8th, and 12th; Fairmont, 6th, 7th, 8th, and 12th; Hinton, 6th and 14th; Huntington, 6th, 12th, and 26th; New Cumberland, 3d, 6th, 7th, 8th, and 13th; Robertsburg, 12th, 13th, 15th, and 16th; Rowlesburg, 7th, 8th, 12th, and 27th; Saint Marys, 5th, 6th, 12th, and 13th; Wheeling, 3d, 6th, 7th, 12th, 13th, 14th, 15th, and 27th; Williamson, 5th, 7th, 11th, 12th, 13th, 14th, 16th, 25th, 26th, and 27th.

Halo, lunar: Elkins, 15th.

Halo, solar: Elkins, 8th and 15th.

Sleet: Holcomb, 1st; Wheeling, 1st and 2d; Smithfield, 19th; Burlington, Marlinton, Piedmont, and Romney, 28th; Terra Alta, 29th.

Smoke: Creston, Holcomb, and New Cumberland, 8th; Lost Creek, 6th, 7th, 8th, 9th, 13th, 14th, 15th, 16th.

Thunderstorms (dates and number of stations reporting): 17th, 7; 28th, 1; 29th, 1.

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	42.5	80	8	3.04	....	....	...	..	..	..
1892	41.7	81	3	3.10	....	....	....	..	..	..
1893	41.4	74	3	2.12	3.22	0.47	....	13	6	11
1894	39.8	82	5	2.11	3.47	0.25	....	12	6	12
1895	44.6	87	12	2.35	4.00	0.20	....	12	8	10
1896	48.1	80	10	3.50	5.07	1.56	....	10	8	12
1897	45.0	76	13	4.45	7.15	0.30	....	9	9	12
1898	41.4	75	— 3	2.84	4.74	1.00	....	9	11	10
1899	45.6	76	14	1.93	3.49	0.20	T.	11	9	10
1900	45.5	86	9	5.20	8.88	2.71	2.8	8	8	14
1901	38.0	79	7	2.51	5.35	1.23	4.3	8	6	16
1902	50.3	83	12	3.27	4.56	1.23	0.7	11	6	13
1903	38.0	80	— 4	2.46	4.98	0.67	4.6	11	8	11
1904	41.2	75	9	0.64	3.05	0.07	1.4	12	7	11
1905	41.8	74	10	2.44	5.67	0.67	T.	13	7	10
1906	44.2	84	13	2.39	5.50	0.35	2.2	15	5	10
1907	41.8	74	13	3.40	7.05	1.41	1.0	10	8	12
1908	43.3	81	0	1.14	2.73	0.48	5.2	15	8	7
1909	49.1	84	12	1.34	3.85	0.23	0.2	14	7	9
1910	37.3	75	5	1.95	4.41	0.66	1.8	8	7	15
1911	40.5	83	7	2.74	5.54	1.27	2.0	10	7	13
1912	42.8	78	2	1.69	4.08	0.40	0.9	14	7	9
1913	44.5	82	— 1	4.49	7.50	0.61	13.4	12	5	13
1914	42.6	84	2	1.32	2.27	0.50	2.9	16	6	8
1915	45.2	85	11	3.06	5.99	1.15	1.1	13	8	9
1916	43.8	81	8	1.77	3.07	0.75	0.3	16	5	9
1917	39.6	78	0	0.89	3.65	0.05	1.5	16	4	10
1918	42.9	79	12	1.89	4.60	0.64	0.2	13	5	12
Means and extremes ..	42.9	87	— 4	2.50	8.88	0.05	2.3	12	7	11

Climatological Data for November, 1918.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.					Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	
Panhandle Division.																				
Bayard††	Grant	2,700	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	2	43.2	.....	74	9	14	14†	46	1.17	.....	0.60	0	4	17	3	10	n.	Elmer Keister.
Burlington	Mineral	875	24	40.9	+ 1.4	68	8	17	12†	40	0.98	−0.76	0.98	0	1	13	12	5	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	29	.....	.....	.....	.....	.....	.....	.....	1.90	−0.34	1.50	0	3	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	26	43.0	+ 0.1	67	17	22	24	33	1.10	−1.03	0.72	0	2	17	8	5	w.	G. W. Van Metre, C. E
Moorefield	Hardy	900	22	44.4	+ 0.9	73	8	16	24	46	1.35	−0.27	0.81	0	3	25	2	3	.....	M. S. Henkel.
Piedmont	Mineral	919	5	40.2	.....	64	8	21	12†	31	0.93	.....	0.45	0	6	12	7	11	nw.	C. A. Suter, Jr.
Romney[e]	Hampshire	824	20	42.0	− 0.6	70	16	17	24	43	1.17	−0.79	0.73	0	3	11	2	12	w.	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	19	43.0[b]	+ 0.4	74[b]	8	17[b]	12	49[b]	1.30	−0.34	0.70	0	2	10	4	16	w.	J. M. Mallow.
Wardensville	Hardy	1,200	0	41.6[c]	.....	76[c]	8	15[b]	22†	51[d]	0.64	.....	0.35	0	5	12[1]	6[1]	0[1]	w.	Luther F. Sutton.
Averages and	extremes	.....	....	42.3	+ 0.4	76[c]	8	14	14†	51[d]	1.17	−0.42	1.50	0	3	16	6	8	w.	
Northern Division.																				
Bens Run	Pleasants	622	16	44.4	+ 1.2	71	7	23	26	38	2.16	−0.41	0.69	0	7	16	5	9	.....	J. D. Riggs.
Brandonville	Preston	1,809	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	21	41.8	+ 0.3	75	17	19	26	52	2.15	−1.22	0.90	T.	5	10	7	13	.....	H. A. Darnall.
Cortland	Tucker	3,300	2	.....	.....	.....	.....	.....	.....	.....	1.50	.....	0.61	0	3	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	16	43.8	+ 0.1	71	17	19	26	38	2.49	+0.04	0.70	0	8	13	0	17	w.	J. M. Reed.
Davis	Tucker	3,093	9	.....	.....	.....	.....	.....	.....	.....	2.62	.....	1.72	2.0	4	13	2	15	.....	Ross C. Male.
Elizabeth	Wirt	646	6	.....	.....	.....	.....	.....	.....	.....	1.81	.....	0.58	0	5	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	17	40.6	+ 1.0	74	8	19	12	44	1.60	−1.26	0.57	T.	7	6	9	15	w.	U. S. Weather Bureau.
Fairmont	Marion	883	12	42.4	− 0.4	77	17	21	26†	47	2.28	−0.42	0.93	T.	9	16	1	13	w.	F. P. Hall.
Glenville	Gilmer	738	24	44.6	+ 1.1	79	17	15	26	49	2.18	−0.81	0.51	0	8	13	8	9	w.	Howard R. Brannon.
Grafton††	Taylor	1,000	25	42.1	− 1.0	76	17	18	27	48	2.00	−1.09	.....	0	6	10	7	13	e.	W. C. Byers.
Lost Creek	Harrison	1,026	20	42.7	+ 0.5	78	17	16	26	46	2.48	+0.02	0.70	0	6	14	1	15	w.	Allen Smith.
Mannington	Marion	974	15	42.5	+ 1.4	72	17	18	26†	45	2.54	+0.11	0.70	0	8	12	3	15	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. W. Muldoon.
Moundsville	Marshall	642	15	.....	.....	.....	.....	.....	.....	.....	1.77	+0.07	0.90	0	4	11	4	15	sw.	M. Z. White.
New Cumberland	Hancock	987	20	43.0	+ 1.7	72	7	18	12†	43	1.98	+0.17	1.17	0	5	13[a]	10[a]	6[a]	sw.	M. F. Smith.
New Martinsville	Wetzel	634	24	45.8	+ 1.2	72	7	21	26†	42	1.80	−0.81	0.65	0	7	12	4	14	s.	Wm. Ankrom.
Parkersburg	Wood	638	31	44.2	+ 1.1	69	28	22	26	47	1.85	−0.98	0.78	T.	7	10	5	15	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	18	41.2	0	76	16	15	12	51	2.10	−0.42	1.50	T.	2	12	6	12	.....	J. W. Swisher.
Philippi	Barbour	1,149	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Attie G. Robinson.
Pickens	Randolph	2,697	15	39.6	− 1.0	73	8	15	26	39	4.15	+0.34	1.98	7.0	6	15	4	11	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	31	.....	.....	.....	.....	.....	.....	.....	3.33	+0.31	0.82	T.	9	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	9	.....	.....	.....	.....	.....	.....	.....	2.33	+0.27	0.85	0	10	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	12	41.0	0	70	7†	17	26†	44	2.83	+0.04	0.70	T.	9	15	4	11	se.	G. M. Whisler.
Terra Alta	Preston	2,612	17	41.0[f]	− 1.1	70	8†	21[f]	3	39[f]	1.44	−2.12	0.80	1.0	4	16	8	6	w.	Charles W. Gray.
Wellsburg	Brooke	1,225	17	41.8	+ 0.6	66	7†	17	27	43	1.57	−0.54	0.50	T.	6	14	5	11	w.	George P. Pfister.
Weston	Lewis	1,026	22	44.0	+ 0.7	77	17	19	26	42	2.35	−0.95	0.69	0	6	9	11	10	.....	Weston State Hospital.
Wheeling	Ohio	645	31	42.8	+ 0.4	73	7	21	27†	47	1.63	−0.82	0.48	T.	9	11	3	16	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	42.6	+ 0.5	79	17	15	12†	52	2.21	−0.45	1.98	0.4	6	13	5	12	w.	
Southern Division.																				
Bancroft	Putnam	574	13	43.4	− 1.6	72	28	20	26	44	1.57	−0.95	0.55	0	8	19	0	11	ne.	R. E. Dent.
Beckley ††	Raleigh	2,440	17	.....	.....	.....	.....	20	25	....	1.76	−0.75	0.69	0	6	20	0	10	w.	John A. Ewart.
Bluefield	Mercer	2,558	22	44.2	− 0.3	73	8	23	26	40	1.61	−0.84	0.53	T.	10	11	8	11	.....	Norfolk & Western Ry.
Breading	Mingo	507	0	46.9[1]	.....	77[1]	8	23[1]	13	44[1]	.....	.....	.....	.....	.....	10[h]	4[h]	8[h]	.....	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	2	.....	.....	.....	.....	.....	.....	.....	4.60	.....	2.00	0	4	.....	.....	.....	sw.	Miss Katie Jarvis.
Charleston	Kanawha	597	14	49.0	+ 0.9	77	17	20	27	40	2.25	−0.66	0.73	0	7	5	0	25	w.	C. V. Lewis.
Clay	Clay	706	1	.....	.....	.....	.....	.....	.....	.....	1.94	.....	0.58	0	8	.....	.....	.....	....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	15	45.0	+ 1.4	73	6	17	26	44	1.38	−0.89	0.48	0	7	12	6	12	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	1	.....	.....	.....	.....	.....	.....	.....	2.01	.....	0.50	0	9	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	1	.....	.....	.....	.....	.....	.....	.....	2.11	.....	0.42	0	8	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	2	.....	.....	.....	.....	.....	.....	.....	1.81	.....	0.43	0	10	.....	.....	.....	.....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	1	.....	.....	.....	.....	.....	.....	.....	1.21	.....	0.30	0	6	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans	Jackson	606	5	44.2	.....	68	28	22	26	31	1.92	.....	0.45	0	7	14	3	13	.....	B. F. Sayre.
Gary	McDowell	1,426	1	.....	.....	.....	.....	.....	.....	.....	0.87	.....	0.25	0	6	19	3	8	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs.	Summers	1,600	21	44.4[b]	+ 1.8	68	3	18[a]	24	45[a]	2.80	+0.71	0.71	0	5	17	4	9	w.	W. H. Gwinn.
Hinton	..do	1,450	20	42.6	− 1.8	73	17	22	26	35	1.22	−0.93	0.56	0	7	11	4	15	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	5	40.8	.....	76	8	15	26	46	2.38	.....	.....	T.	7	10	3	17	.....	R. C. Ferguson.
Huntington	Cabell	538	23	43.5	− 0.2	68	28	23	26	42	1.12	−1.58	0.42	0	7	15	1	14	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	1	.....	.....	.....	.....	.....	.....	.....	1.89	.....	0.40	0	8	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	17	41.4	0	70	17	17	13	41	1.50	−0.77	0.88	0	4	18	3	9	nw.	Geo. T. Argabate.
Logan	Logan	687	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	18	35.9	− 2.4	60	9	14	13†	38	1.92	−0.82	1.10	T.	5	9	9	12	n.	S. L. Brown.
Nuttallburg	Fayette	2,252	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	24	45.5	+ 0.3	72	28	20	26	42	1.49	−1.31	0.44	0	7	12	11	7	sw.	W. D. Holmes.
Powellton	Fayette	933	21	45.2	+ 0.5	79	17	23	26	36	1.38	−1.25	0.52	T.	6	10	8	12	w.	J. F. Campbell.
Raleigh	Raleigh	2,130	1	.....	.....	.....	.....	.....	.....	.....	1.89	.....	0.74	0	8	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	1	.....	.....	.....	.....	.....	.....	.....	1.47	.....	1.05	T.	3	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	17	44.0	+ 0.6	72	3†	18	26	44	1.41	−0.94	0.43	0	8	13	3	14	.....	E. C. Brace, Jr.
Ryan	Roane	700	14	42.0	− 1.4	75	15†	14	26	54	1.81	−0.68	0.82	0	7	13	3	14	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	1	.....	.....	.....	.....	.....	.....	.....	1.57	.....	0.86	T	5	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	13	42.8	− 0.5	72	18	18	26†	44	2.33	−0.08	0.50	0	6	7	9	14	.....	A. M. McKown.
Sutton	Braxton	839	11	41.2	− 0.1	66	3†	12	26	42	3.02	+0.32	0.75	0	8	22	3	5	.....	C. B. Eakle.
Union	Monroe	2,250	13	41.4	+ 1.1	72	9	17	13†	42	1.76	−0.26	0.93	0	2	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Ayres.
Williamson	Mingo	660	17	45.6	+ 0.3	78	17	25	25	44	1.24	−1.43	0.35	0	7	14	7	9	w.	J. F. Keyser.
Averages and	extremes	.....	....	43.4	− 0.1	79	17	12	26	54	1.85	−0.73	2.00	T.	7	13	5	12	w.	
State averages and	extremes	.....	....	42.9	+ 0.2	79	17	12	26	54	1.89	−0.55	2.00	0.2	6	13	5	12	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[z] Approximated by the observer.

Daily Precipitation for November, 1918.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac									T.								.05	.60		T.	.02							.50				1.17
Brandywine	do																	T.			T.								.98				0.98
Burlington	do																	T.	1.50											.35			1.90
Harpers Ferry ‖‖	do	.05																.72											.38				1.10
Martinsburg	do																	.08	.81										.46				1.35
Moorefield	do																		.45	T.	.02	.05							.32				0.98
Piedmont	do	.04	.05		T.						T.						.73			.04									.40				1.17
Romney	do																		.70										.60				1.30
Upper Tract	do																	.05	.22	.01		.01								.35			0.64
Wardensville ‖‖	do					T.					T.																						
Northern Division.																																	
Bens Run	Ohio	.05								.15								.69	.42	.32	.18								.35				2.16
Brandonville ‖‖	Monongahela																T.	T.	.90	.45	.35	T.							.35				2.15
Buckhannon	do	.10																.29		.61									.60				1.50
Central Station	Middle Is. Creek																	.13	.57	.40	.41								.25	.28			2.49
Cortland ‖‖	Monongahela																	T.	.70	T.	.10	.10								1.72			2.62
Creston ‖‖	Little Kanawha	.35	T.								.10								.58	.33	.24								.51				1.81
Davis ‖‖	Monongahela	T.	T.															.13	.93	.32	.22	.06		T.	T.				.22	.24	T.		2.28
Elizabeth ‖‖	Little Kanawha										.15						T.	.46	.22	.11	.30	T.	T.	T.					.47	T.			1.60
Elkins ***	Monongahela	.03			T.					T.	.01						T.	.15	.93	.32	.22	.06		T.	T.				.22	.24	T.		2.28
Fairmont ‖‖	do	.13	T.		T.						.01							.26	.51	.40	.40	.04							.30				2.18
Glenville ‖‖	Little Kanawha	.23	.04															*	*	*	1.45								.48				2.00
Grafton	Monongahela	.07									T.							.70	.45	.40	.28	T.	T.						.60				2.48
Lost Creek	do	.05																.70	.30	.55	.34	.07							.45	T.			2.54
Mannington	do	.11				T.				.02	T.																						
Morgantown	do																	.90	.27	.20									.40				1.77
Moundsville ‖‖	Ohio																	*	1.17		.50	T.	T.						.26				1.98
New Cumberland	do	T.								.05								.65	.20	.05	.20	.05							.50				1.80
New Martinsville	do									.15																							
Parkersburg ***	Ohio	.03		T.						.09								.64	.35	.25	.03	T.		T.					.46				1.85
Parsons	Monongahela	.60		T.														T.	T.	1.50	T.					T.							2.10
Philippi	do																																
Pickens	do	.13									T							T.	1.98	.32	.30	.10						1.32				4.15
Rowlesburg ‖‖	do	.34	T.			.04												.14	.82	.58	.50	.38							T.	.48	.05		3.33
Saint Marys ‖‖	Ohio	.10									.15							.05	.85	.40	.38	.05	.05						.25	.05			2.33
Smithfield ‖‖	Fishing Creek	.10	.01								.05							.40	.70	.50	.45	.12	T.	T.					.50	T.			2.83
Terra Alta	Monongahela																	.80		T.	T.	.10							.50	.04			1.44
Wellsburg	Ohio									.08								.50	.18	.30	.21		T.	T.					.30				1.57
Weston	Monongahela										.10							.50	.60	.50	.30								.35				2.35
Wheeling ‖‖	Ohio	T.	.01		T.	.02					.05							.09	.48	.43	.27	.02		T.					T.	.26	T.		1.63
Southern Division.																																	
Bancroft ‖‖	Great Kanawha	.10																.10	.55	.17	.17	.10							.28	.10			1.57
Beckley	do																.02	.48	.30	.20	.07								.69				1.76
Bluefield	do	.18								T.	.01						.01	.20	.53	.10	.12	.04	.02						.40				1.61
Breading	do										.05						.32	.50		.50	.14												†††
Camden-on-Gauley ‖‖	do																		.80	1.00	2.00								.80				4.60
Charleston ‖‖	do	.20	T.								.15							.30	.73	.25	.20	T.							.42				2.25
Clay ‖‖	do	.05																.58	.25	.15	.30	.10							.37	.14			1.94
Cuba	Sand Creek	.03								.09							T.	.45	.14	.16	.03								.48				1.38
Dam 19 O. R. ‖‖	Ohio	.11									.14							.17	.31	.25	.41	.02							.50	.10			2.01
Dam 20 O. R. ‖‖	do	.12									.10							.29	.42	.33	.35								.41	.09			2.11
Dam 22 O. R. ‖‖	do	.12									.12							.30	.20	.40	.10	.05	.01						.43	.08			1.81
Dam 26 O. R. ‖‖	do	.10									T.							.30	.30	.10									.30	.11			1.21
Elkhorn	Big Sandy																																
Evans	Ohio	.05								.15								.40	.45	.17	.25								.45				1.92
Gary ‖‖	Big Sandy																.10	.20	.15	.15	.02								.25				0.87
Green Sulpr. Spgs.	Great Kanawha						.50								.62								.44	.53					.71				2.80
Hinton ‖‖	do																	.18	.38	.04	.02	.04							.16	.40			1.22
Holcomb	do	.22															T.	*	*	*	*	1.72							.44				2.38
Huntington ‖‖	Ohio	.08									.04							.24	.18	.12	.12	T.							.34	T.			1.12
Kayford ‖‖	Great Kanawha	.21	.05																.29	.39	.27	.18							.40	.10			1.89
Lewisburg	do																T.	.21	.35	T.	.06								.88				1.50
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do	T.															T.	.65	.06	.03	.03	T.	T.	T.					1.10				1.92
Nuttallburg	do																																
Point Pleasant ‖‖	Ohio	.04																.44	.20	.24	.15	.02							.40				1.49
Powellton		.01																.37	.20	.10	.18								.52				1.38
Raleigh ‖‖	Great Kanawha	.06																.05	.50	.27	.18	.09							.65	.09			1.89
Renick ‖‖	do	T.																.02		.40										1.05			1.47
Robertsburg ‖‖	do	.13									.10							.17	.23	.18	.17	T.							.29	.14			1.41
Ryan	do	.05									.03							.82	.19	.20	.11			T.					.41				1.81
Sissonville ‖‖	do	.20									*									.86	.22	.29		T.									1.57
Spencer ‖‖	Little Kanawha	.27																.50	.50	.23	.35								.48				2.33
Sutton	Great Kanawha	.22												.22	.18				.75	.65	.42	.10							.48				3.02
Union	do																			.93									.83				1.76
White Sulphur Spgs.	do																																
Williamson ‖‖	Big Sandy	.20									T.							.15	.32	.14	.06	.02							.35	T.			1.24

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for November, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum																																
	Minimum																																
Brandywine	Maximum	64	62	60	60	58	59	65	70	74	56	50	55	58	60	65	62	69	68	65	63	46	41	36	45	44	45	55	48	51	47	....	56.7
	Minimum	40	38	20	35	39	22	28	29	40	40	20	15	16	14	21	35	50	45	39	40	39	34	33	14	19	16	21	25	36	29	....	29.7
Burlington	Maximum	49	44	57	58	58	55	64	68	60	56	46	50	54	55	60	53	62	63	54	49	44	42	39	39	42	42	51	39	51	46	....	51.7
	Minimum	42	29	21	32	32	25	24	30	32	37	22	17	19	30	23	32	42	44	43	42	39	36	30	17	26	26	19	24	32	35	....	30.1
Martinsburg§	Maximum	51	48	55	56	53	55	58	64	58	53	48	49	52	56	60	58	67	60	55	51	45	46	41	40	45	42	52	52	51	46	....	52.2
	Minimum	40	37	29	32	40	29	29	32	35	47	31	24	25	26	27	28	38	50	47	44	43	38	36	22	27	33	23	29	34	38	....	33.8
Moorfield	Maximum	53	50	65	62	62	60	72	73	67	64	53	59	60	63	67	60	69	70	56	52	51	48	42	39	48	49	58	51	52	46	....	57.4
	Minimum	41	38	23	39	26	23	26	29	41	46	22	18	19	31	23	32	43	45	46	43	39	36	36	16	20	24	19	24	41	32	....	31.4
Piedmont	Maximum	44	40	43	49	48	42	60	64	60	56	44	46	50	53	56	52	60	56	45	42	42	38	39	36	37	40	49	41	48	39	....	47.3
	Minimum	38	36	25	35	41	27	29	33	45	42	24	21	22	32	28	35	44	45	39	40	37	35	34	25	29	28	21	27	39	36	....	33.1
Romney	Maximum	50	46	61	64	55	61	....	....	....	....	....	52	59	60	66	70	60	56	50	51	51	48	41	44	45	46	56	50	53	42	....	53.5
	Minimum	40	38	23	35	43	24	....	....	....	....	....	18	19	30	23	33	35	45	39	39	36	36	35	17	24	30	19	31	27	24	....	30.5
Upper Tract	Maximum	60	61	61	62	54	73	73	74	64	62	60	55	56	57	68	68	68	68	....	....	60	60	45	40	41	50	53	49	52	41	....	58.4
	Minimum	36	36	22	29	34	24	24	26	44	42	22	17	18	19	25	30	25	30	25	....	....	34	33	23	18	19	24	20	27	33	....	27.5
Wardensville	Maximum	60	45	59	58	52	58	70	76	63	53	49	53	58	60	62	68	70	57	55	54	45	40	....	....	47	46	55	52	50	....	....	56.1
	Minimum	48	28	23	29	32	22	23	25	30	42	21	18	19	25	22	24	30	38	43	38	40	15	15	....	....	16	18	23	29	22	....	27.1
Northern Division.																																	
Bens Run	Maximum	45	50	65	58	56	68	71	70	67	55	54	59	59	59	66	63	68	58	44	45	45	41	39	35	37	45	52	60	60	42	....	54.5
	Minimum	39	35	29	49	37	32	33	40	50	34	34	28	29	27	30	38	50	42	40	40	38	36	32	27	27	23	24	30	30	30	....	34.4
Buckhannon	Maximum	44	44	60	53	50	61	64	69	70	55	50	55	50	53	63	67	75	65	50	40	38	38	36	37	35	39	46	62	45	46	....	52.0
	Minimum	37	34	25	44	35	37	28	32	49	40	25	23	23	23	25	35	23	42	38	38	35	34	30	28	23	19	20	28	38	34	....	31.5
Creston	Maximum	45	49	64	59	55	65	67	70	67	54	51	57	54	58	65	65	71	68	45	44	43	41	39	36	37	41	49	65	59	42	....	54.2
	Minimum	38	35	27	42	36	30	30	35	50	35	31	25	26	25	27	38	48	41	40	40	40	36	35	29	24	19	21	29	40	30	....	33.4
Elkins	Maximum	40	40	63	54	51	67	65	74	67	51	53	62	49	52	65	65	72	56	40	39	37	34	32	33	34	42	49	57	48	37	....	50.9
	Minimum	32	26	23	43	31	26	26	30	46	37	24	19	21	30	24	33	50	40	35	35	33	31	28	23	26	21	21	27	34	31	....	30.2
Fairmont§	Maximum	44	59	65	54	53	69	70	70	69	46	54	62	55	57	66	62	77	49	41	42	40	39	36	33	39	44	40	69	44	43	....	53.0
	Minimum	37	36	27	33	44	29	29	30	37	38	31	25	25	24	25	28	36	49	41	38	37	35	34	25	25	21	21	22	40	31	....	31.8
Glenville	Maximum	58	53	70	58	60	73	75	74	72	54	59	65	62	64	70	67	79	62	45	43	44	42	40	37	40	48	58	70	67	45	....	58.5
	Minimum	35	33	24	36	34	28	26	31	47	31	25	22	21	19	23	33	49	43	40	40	38	35	33	29	20	15	18	25	40	32	....	30.8
Grafton	Maximum	44	45	64	54	48	68	69	69	70	57	53	59	53	50	65	66	75	63	47	42	42	38	42	37	34	40	47	66	56	40	....	53.5
	Minimum	38	35	23	37	42	28	21	29	48	36	27	20	22	22	24	34	34	42	38	38	37	34	37	27	20	20	18	25	37	29	....	30.7
Lost Creek	Maximum	47	49	64	56	54	68	70	73	72	55	54	62	56	60	63	63	78	60	43	43	41	38	38	34	37	45	52	70	59	50	....	55.3
	Minimum	35	35	21	37	38	24	25	32	38	31	25	18	21	20	23	31	49	42	39	38	38	34	32	28	20	16	17	24	38	34	....	30.1
Mannington	Maximum	50	46	62	55	50	67	71	71	67	55	51	60	55	58	64	63	72	61	44	42	41	39	37	34	38	43	51	68	61	41	....	53.9
	Minimum	35	36	24	35	45	25	26	31	46	31	27	20	22	20	23	31	51	43	39	39	37	34	34	27	23	18	18	24	39	29	....	31.1
Morgantown	Maximum																																
	Minimum																																
New Cumberland	Maximum	45	44	60	55	53	65	72	65	63	54	49	56	60	55	65	62	62	63	45	44	40	41	38	39	41	44	48	66	63	46	....	53.4
	Minimum	36	30	25	45	40	23	29	38	51	44	33	18	27	27	26	40	51	42	38	37	35	33	29	22	23	23	18	23	36	32	....	32.5
New Martinsville	Maximum	58	54	66	62	59	68	72	70	69	64	60	60	57	60	65	62	65	62	57	53	47	44	41	36	40	45	52	70	63	48	....	57.6
	Minimum	42	35	26	45	38	31	30	37	50	34	32	28	28	25	28	35	48	43	40	40	39	36	34	26	27	21	21	28	40	30	....	33.9
Parkersburg	Maximum	44	49	63	57	52	64	67	67	65	46	49	56	56	58	65	65	66	56	44	45	42	41	37	35	38	42	50	69	50	41	....	52.6
	Minimum	37	34	32	47	40	34	36	41	46	39	35	28	31	29	34	44	56	43	40	41	39	36	31	28	27	22	24	34	38	31	....	35.9
Parsons	Maximum	41	43	65	52	56	70	71	75	72	54	64	65	53	56	69	76	60	41	38	35	35	37	45	52	63	53	40	63	54	40	....	54.6
	Minimum	35	28	20	30	34	24	23	24	43	39	20	15	18	20	21	35	41	37	35	32	24	25	16	16	23	36	30	23	36	30	....	27.8
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum	37	41	63	53	45	67	65	73	66	49	53	59	49	54	64	63	68	52	47	35	33	35	30	34	33	35	47	53	50	37	....	49.7
	Minimum	31	28	24	31	27	31	31	35	48	34	21	21	30	24	29	39	52	35	32	31	30	27	25	18	21	15	22	29	32	30	....	29.4
Terra Alta	Maximum	42	33	56	48	47	57	63	70	63	52	51	51	46	48	65	62	70	68	60	50	42	38	36	38	37	37	46	50	60	36	....	50.7
	Minimum	32	29	21	40	35	32	27	31	50	33	24	23	24	31	26	37	52	32	34	28	29	28	26	26	....	....	....	....	....	....	....	31.2
Wellsburg	Maximum	51	46	60	56	52	63	66	65	63	54	48	51	54	52	61	63	61	61	46	44	42	40	38	36	38	40	47	66	62	40	....	52.2
	Minimum	40	31	24	40	38	24	25	33	46	31	36	21	24	22	24	33	49	42	39	39	38	36	31	21	26	23	17	23	38	30	....	31.5
Weston	Maximum	44	45	64	57	53	67	71	71	69	57	60	54	60	62	67	67	77	64	44	42	42	40	39	37	36	44	52	68	60	42	....	55.2
	Minimum	36	33	26	40	41	27	29	34	50	36	24	26	24	26	27	35	54	42	39	39	38	35	33	29	24	19	21	28	39	33	....	32.9
Wheeling§	Maximum	48	49	64	52	58	54	73	61	65	47	54	59	60	59	63	60	62	50	43	44	41	41	39	40	39	44	52	68	69	40	....	53.3
	Minimum	39	31	30	30	42	29	31	35	42	35	38	26	26	25	25	28	39	49	41	39	38	36	34	25	24	24	21	21	34	29	....	32.2
Southern Division.																																	
Beckley	Maximum																																
	Minimum																																
Bluefield	Maximum	40	49	60	66	58	64	66	73	66	66	65	57	53	58	59	68	68	70	43	39	38	38	32	43	42	50	67	54	56	42	....	55.0
	Minimum	34	29	27	43	36	37	32	36	56	28	25	26	26	32	34	31	55	40	35	35	34	31	28	26	24	23	33	35	37	31	....	33.3
Charleston	Maximum	58	56	68	65	70	71	72	71	63	60	64	60	61	60	67	68	77	72	68	68	70	68	59	55	54	54	55	58	70	75	....	64.6
	Minimum	30	36	29	33	37	34	33	39	33	30	32	27	28	27	28	40	42	48	42	42	40	39	36	30	25	21	20	21	33	35	....	33.3
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum	38	50	68	63	64	60	58	56	58	62	63	64	65	64	58	59	57	56	60	61	60	58	56	51	49	57	55	54	55	56	....	57.8
	Minimum	36	36	23	35	38	37	40	34	32	28	26	25	32	38	31	28	24	23	21	26	33	39	47	18	....	22	26	39	32	29	....	31.0
Hinton§	Maximum	44	49	60	61	57	49	65	68	68	50	52	50	54	57	61	58	73	50	43	45	44	37	37	41	46	42	55	56	53	44	....	52.6
	Minimum	39	34	28	28	38	33	32	33	37	37	29	28	27	28	28	29	46	44	41	39	39	36	32	29	25	22	24	28	37	30	....	32.7
Holcomb§	Maximum	39	51	66	52	57	68	67	76	68	60	58	62	52	58	70	71	74	46	39	38	38	35	39	36	38	50	56	54	43	42	....	53.4
	Minimum	32	31	25	30	40	25	27	30	34	33	21	20	20	21	26	28	38	42	35	35	34	30	29	28	20	15	16	22	33	30	....	28.3
Huntington§	Maximum	44	53	54	53	55	63	65	67	63	48	50	54	56	59	64	64	66	50	44	44	43	42	37	36	38	42	48	68	46	43	....	52.0
	Minimum	40	33	31	34	38	35	35	37	43	38	40	30	30	30	30	30	45	48	41	41	41	38	36	30	28	23	24	26	42	32	....	35.0
Lewisburg	Maximum	48	47	60	55	59	59	65	68	66	59	53	51	52	56	65	65	70	63	42	43	40	37	34	39	39	44	55	50	49	40	....	52.4
	Minimum	35	32	22	34	38	27	24	30	44	38	21	20	17	29	24	36	51	42	38	37	35	32	30	21	24	18	24	31	32	30	....	30.5
Marlinton	Maximum	40	48	52	48	54	56	58	56	60	54	48	46	44	50	56	54	52	46	40	38	36	34	32	34	36	38	48	38	42	34	....	45.7
	Minimum	32	28	20	30	24	26	20	26	32	34	18	16	14	22	20	30	46	38	36	34	32	30	28	14	14	16	14	30	32	28	....	26.1
Point Pleasant	Maximum	56	52	65	66	60	68	70	69	67	54	53	59	60	63	69	66	65	65	44	45	44	43	42	38	41	45	53	72	67	46	....	56.9
	Minimum	39	28	40	43	34	31	32	39	48	33	31	26	28	27	28	41	53	43	40	40	39	36	34	24	27	20	21	30	41	28	....	34.1
Powellton	Maximum	43	47	64	56	55	64	63	67	73	64	51	55	54	58	65	63	79	61	47	43	43	42	39	38	39	38	44	61	58	45	....	54.0
	Minimum	39	35	28	42	40	34	35	37	54	39	29	28	29	29	31	46	59	46	42	41	40	37	35	32	25	23	26	32	44	33	....	36.3
Robertsburg§	Maximum	48	55	72	60	60	69	70	69	65	47	51	60	58	63	66	67	66	49	46	44	43	42	39	48	45	47	56	72	46	45	....	55.6
	Minimum	36	32	28	31	35	29	31	34	37	33	35	25	26	26	29	30	42	42	41	40	41	37	35	26	24	18	22	32	44	29	....	32.3
Ryan	Maximum	48	52	64	54	62	65	69	70	70	58	48	50	45	55	75	75	61	60	55	45	44	42	40	38	35	45	45	70	58	45	....	54.8
	Minimum	34	31	22	38	28	22	24	30	47	26	25	17	19	18	21	37	52	41	38	37	37	33	28	27	18	14	18	26	40	26	....	29.1
Spencer§	Maximum	45	51	68	56	52	67	68	70	69	60	51	60	60	61	64	68	71	72	42	42	42	42	35	36	38	44	45	64	48	44	....	54.5
	Minimum	37	32	26	41	37	26	29	32	35	28	30	23	23	24	25	24	52	48	41	40	36	30	28	23	24	18	18	22	45	32	....	31.0
Sutton	Maximum	48	52	66	66	56	60	63	63	62	60	60	58	56	54	57	58	60	60	46	42	43	43	40	37	38	41	43	65	65	43	....	53.5
	Minimum	34	33	24	32	30	30	28	32	46	32	30	20	24	26	28	30	28	28	30	38	37	33	32	26	21	12	18	26	36	24	....	28.9
Union§	Maximum	51	49	50	66	68	60	68	70	72	67	64	50	54	63	65	67	68	70	47	43	44	40	35	36	40	42	50	60	56	48	....	55.4
	Minimum	35	32	22	30	32	27	26	30	30	28	23	19	17	26	26	27	29	32	31	34	34	32	29	25	20	17	25	30	27	29	....	27.5
White Sulphur Spgs.	Maximum																																
	Minimum																																
Williamson§	Maximum	42	51	66	64	59	68	68	71	68	55	55	60	60	63	67	64	78	50	45	44	44	42	39	43	43	46	57	73	53	48	....	56.2
	Minimum	40	30	30	40	39	35	35	36	41	42	30	31	30	30	30	32	40	47	40	41	40	37	35	32	25	26	26	29	47	30	....	34.9

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

JAN 29 1919

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

DECEMBER, 1918

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JANUARY 25, 1919

Departure of the Mean Temperature from the Normal, December, 1918.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXVI. PARKERSBURG, W. VA., DECEMBER, 1918. No. 12

GENERAL SUMMARY.

The past month, with an average temperature of 41°, was he warmest December of record, or since 1891, while the cor-esponding month in 1917 was the coldest of record for Decem-ber. The precipitation averaged more than an inch above the normal and was mostly rain in the agricultural districts; but he distribution was favorable over the State and throughout he month, and there was no damage from washing. Until nto the last decade the conditions were especially favorable for vinter grains, grazing, and farm work. Moderately cool weather, without sufficient snow-cover, prevailed on a few days luring the last decade.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.12 and 30.14 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.63 inches on the 19th, and 29.55 inches on the 24th. Elkins, 30.68 nches on the 19th, and 29.57 inches on the 24th.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 41.0°. The departure from the normal for 38 stations having en or more years of record was +7.3°. The month opened vith the thermal conditions nearly normal, but the temperature vas continuously and generally much above the seasonal aver-ge from the 5th to the 25th, with the highest readings occurr-ng generally on the 8th, 13th, 14th, and 15th. The lowest emperatures occurred on the morning of the 30th, when con-iderably warmer weather set in.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were s follows: Parkersburg, 8 a. m., 83 per cent; 8 p. m., 75 per cent. The December averages for the same hours for the past 30 years are 83 and 76 per cent, respectively. Elkins, 8 a. m., 86 per cent; 8 p. m., 79 per cent. The December aver-ges for Elkins for the same hours for the past 18 years are 86 nd 80 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 64 stations reporting, was 4.41 inches. The departure from the normal for 44 sta-ons having ten or more years of record was +1.00 inch. ight snow or rain fell on the 3d-4th and moderate rain on the -11th, 13-15th, 21st-22d, and 24th. Light snow or snow flur-es occurred in most sections daily from the 25th to the 29th. oderate rain set in on the 31st.

WIND.

The average wind velocity at Parkersburg was 5.9 miles per hour, or 0.2 mile below the December average for 28 years. The average at Elkins was 6.2 miles per hour, or 1.5 miles above the December average for 19 years. The highest velocity at Parkersburg was 32 miles per hour from the southwest on the 6th, and at Elkins 30 miles per hour from the south on the 6th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 23 per cent of the possible amount, or 4 per cent below the December average for 21 years. The average at Elkins was 30 per cent, or normal as compared with the December average for 19 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Burlington, 12th; Charleston, 22d; Dam No. 26 (Hogsett, W. Va.), 12th and 18th; Elkins, 12th and 17th; Fairmont, 12th; Grafton, 2d, 17th, 18th, and 23d; Hinton, 23d; Holcomb, 23d; Lewisburg, 15th; Marlinton, 23d; New Cumberland, 9th, 12th, 17th, 18th, 19th, 20th, and 23d; Parkersburg, 12th, 18th, and 23d; Pickens, 9th and 15th; Robertsburg, 12th; Romney, 12th, 13th, and 14th; Rowlesburg, 12th and 17th; Smithfield, 11th, 23d, and 24th; Terra Alta, 9th, 15th, 22d, and 31st; Wardensville, 14th; Wellsburg, 9th and 18th; Wheeling, 2d, 9th, 12th, 18th, 20th, and 23d; Williamson, 7th, 10th, 17th, 18th, 19th, 23d, and 30th.

Halos, lunar: Elkins, 12th, 13th, and 20th; Parkersburg, 13th and 15th.

Halo, solar: Upper Tract, 5th.

Sleet: Marlinton, 31st; Smithfield, 4th.

COMPARATIVE DATA FOR DECEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	40.9	75	6	3.27	....	....	...	..	..	..
1892	34.1	72	−10	2.91	....	....	....	..	..	..
1893	37.1	76	7	2.05	3.73	0.56	....	10	8	13
1894	36.3	80	−29	4.04	6.56	1.71	....	11	7	13
1895	36.9	72	− 6	2.87	4.14	1.85	7.1	8	9	14
1896	35.3	67	2	1.68	2.88	0.57	....	12	9	10
1897	37.3	72	− 4	4.00	6.79	2.05	....	6	9	16
1898	33.4	69	−12	2.66	4.23	0.71	7 0	12	8	11
1899	33.3	77	−17	2.81	4.46	1.22	3.9	11	8	12
1900	34.6	66	3	2.26	3.45	1.32	1.0	11	7	13
1901	32.3	75	− 9	5.84	8.97	3.57	3.8	7	8	16
1902	33.9	70	− 2	5.33	9.95	2.01	9.4	5	7	19
1903	26.5	59	−11	2.00	4.43	0.30	7.8	12	8	11
1904	32.8	71	−20	3.12	5.91	1.63	9.8	8	7	16
1905	35.6	70	3	3.11	5.24	1.30	3.4	11	6	14
1906	35.9	70	− 1	4.73	11.15	1.83	6.2	5	6	20
1907	35.5	70	− 2	3.36	9.31	0.70	5.2	9	8	14
1908	36.4	73	5	3.03	7.36	1.06	6.0	9	8	14
1909	28.8	78	−10	2.55	6.00	1.16	10.9	9	8	14
1910	28.4	72	− 8	2.72	6.90	1.00	14.6	7	7	17
1911	39 3	74	4	3.27	5.58	1.25	1.6	9	5	17
1912	35.8	76	− 6	2.88	5.55	1.45	7.1	12	7	12
1913	36.4	68	3	2.82	3.81	1.10	2.9	9	8	14
1914	30.3	70	−20	5.46	8.04	2.58	12.5	7	4	20
1915	32.8	68	0	4.35	7.19	1.35	7.6	5	7	19
1916	32.8	77	−18	3.33	6.38	0.85	10.6	13	7	11
1917	24.3	67	−37	1.51	3.32	0.47	11.8	11	6	14
1918	41.0	74	0	4.41	8.14	2.70	3.2	8	6	17
Means and extremes	34.2	80	−37	3.30	11.15	0.30	7.0	9	7	15

Climatological Data for December, 1918.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard††	Grant	2,700	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	2	40.1	.....	68	8	9	30	36	2.70	.....	0.95	T.	5	14	2	15	s.	Elmer Keister.
Burlington	Mineral	875	24	37.6	+ 5.0	67	8	15	30	33	4.40	+1.74	1.24	2.0	8	5	16	10	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	29	.....	.....	.....	.....	.....	.....	.....	2.93	+0.22	1.65	0	5	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	26	39.0	+ 6.0	68	8	20	30	37	4.88	+2.18	1.66	T.	8	7	13	11	e.	G. W. Van Metre, C. E
Moorefield	Hardy	900	22	40.6	+ 7.3	69	8	13	30	35	3.71	+1.42	1.06	0.1	7	19	4	8	.....	M. S. Henkel.
Piedmont	Mineral	919	5	36.9	.....	58	8	18	28†	25	4.82	.....	1.31	.....	14	9	7	15	se.	C. A. Suter, Jr.
Romney	Hampshire	824	20	40.4	+ 8.1	69	8	14	30	36	4.71	+2.21	1.38	1.0	10	7	6	18	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	19	39.8[a]	+ 5.9	67[a]	8	11[a]	30	38[a]	2.70	+0.42	0.90	T.	6	8	7	16	w.	J. M. Mallow.
Wardensville	Hardy	1,200	0	38.0[b]	.....	67[b]	8	13[a]	30	34[c]	3.40	.....	0.72	T.	10	8[b]	4[h]	11[h]	sw.	Luther F. Sutton.
Averages and	extremes	.....	.....	39.0	+ 6.5	69	8	9	30	38	3.81	+1.36	1.66	0.4	8	10	8	13	w.	
Northern Division.																				
Bens Run	Pleasants	622	16	41.8	+ 8.6	66	13	21	30	34	3.94	+0.02	0.80	2.5	12	12	5	14	.....	J. D. Riggs.
Brandonville	Preston	1,809	7	.....	.....	.....	.....	.....	.....	.....	5.29	.....	1.30	16.0	12	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	21	42.0	+ 9.1	67	10	13	30	33	4.92	+0.83	0.90	4.0	12	9	5	17	.....	H. A. Darnall.
Cortland	Tucker	3,300	2	.....	.....	.....	.....	.....	.....	.....	5.31	.....	1.20	11.0	9	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	16	42.9	+ 8.9	66	10	15	30	33	3.99	+0.72	1.35	1.1	17	7	1	23	sw.	J. M. Reed.
Davis	Tucker	3,093	9	.....	.....	.....	.....	.....	.....	.....	8.09	.....	2.00	0.0	14	7	6	18	.....	Ross C. Male.
Elizabeth	Wirt	646	6	.....	.....	.....	.....	.....	.....	.....	3.11	.....	1.32	.....	9	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	17	40.2	+ 7.7	67	14	10	30	37	5.93	+2.51	1.78	7.6	17	4	6	21	w.	U. S. Weather Bureau.
Fairmont	Marion	883	12	40.4	+ 7.7	66	19	20	30	40	3.66	+0.20	1.12	2.0	14	14	2	15	w.	F. P. Hall.
Glenville	Gilmer	738	24	43.4	+ 8.4	68	10	12	30	45	3.86	+0.12	1.30	1.5	12	11	7	13	w.	Howard R. Brannon.
Grafton	Taylor	1,000	25	41.2	+ 7.2	62	13	18	2†	35	4.92	+1.29	.....	.....	12	4	9	18	e.	W. C. Byers.
Lost Creek	Harrison	1,026	20	41.5	+ 8.1	68	14	11	30	45	4.32	+0.79	0.85	2.0	12	8	3	20	w.	Allen Smith.
Mannington	Marion	974	15	40.9	+ 8.4	62	13	17	30	38	4.20	+0.81	0.79	3.5	18	7	3	21	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. W. Muldoon.
Moundsville	Marshall	642	15	.....	.....	.....	.....	.....	.....	.....	4.48	+1.43	1.10	0.5	8	6	1	24	sw.	M. Z. White.
New Cumberland	Hancock	987	20	38.6[a]	+ 7.6	64[a]	8	19[a]	2†	35[a]	3.55	+0.99	0.73	2.3	12	7	6	18	sw.	M. F. Smith.
New Martinsville	Wetzel	634	24	42.8	+ 7.9	65	13	21	30	37	5.27	+1.65	0.96	.....	14	9	7	15	s.	Wm. Ankrom.
Parkersburg	Wood	638	31	43.3	+ 8.1	67	13	23	30	30	4.23	+1.46	0.87	1.8	16	6	2	23	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	18	39.0	+ 7.7	68	14	9	30	43	4.62	+0.84	1.60	12.4	.....	8	4	19	.....	J. W. Swisher.
Philippi	Barbour	1,149	21	.....	.....	.....	.....	.....	.....	.....	4.77	+0.83	1.00	6.0	11	13	11	7	w.	Attie G. Robinson.
Pickens[a]	Randolph	2,697	15	39.4	+ 7.1	65	14	9	30	34	7.71	+2.77	1.90	22.0	12	5	6	19	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	31	.....	.....	.....	.....	.....	.....	.....	5.58	+1.91	1.48	.....	15	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	9	.....	.....	.....	.....	.....	.....	.....	3.56	+0.06	0.80	3.5	17	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	12	39.2	+ 7.4	65	13	15	30	39	4.65	+0.59	1.08	6.5	18	7	10	14	se.	G. M. Whisler.
Terra Alta	Preston	2,612	17	37.0[c]	+ 6.5	63	14	3[c]	30	36[c]	8.14	+2.49	2.20[r]	17.0	17	8	10	13	w.	Charles W. Gray.
Wellsburg	Brooke	1,225	17	39.7	+ 9.0	66	14	22	7†	34	3.85	+0.64	0.95	1.0	9	8	5	18	w.	George P. Pfister.
Weston	Lewis	1,026	22	43.5	+ 8.4	69	21	22	30	38	4.70	+0.99	1.45	3.5	13	3	8	20	.....	Weston State Hospital.
Wheeling	Ohio	645	31	39.2	+ 5.6	66	8	22	30	35	4.15	+1.16	0.92	0.8	16	6	5	20	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	.....	40.8	+ 7.8	69	21	3	30	45	4.84	+1.09	2.20	6.0	13	8	5	18	w.	
Southern Division.																				
Bancroft	Putnam	574	13	39.4	+ 3.9	62	8	18	30	35	3.23	+0.10	0.80	1.0	12	13	0	18	nw.	R. E. Dent.
Beckley	Raleigh	2,440	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John A. Ewart.
Bluefield	Mercer	2,558	22	42.2	+ 7.2	63	14	14	30	40	3.88	+0.93	0.95	3.2	16	7	11	13	.....	Norfolk & Western Ry.
Breading	Mingo	507	0	43.6[a]	.....	70[a]	13	15[a]	30	36[a]	4.40	.....	1.00	1.1	13	9	6	16	.....	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	2	.....	.....	.....	.....	.....	.....	.....	7.33	.....	1.40	1.3	14	3	0	28	n.	Miss Katie Jarvis.
Charleston	Kanawha	597	14	47.4[a]	+ 7.4	74	15	19[a]	30	44[a]	3.29	0	1.10	T.	6	8	0	23	ne.	C. V. Lewis.
Clay††	Clay	706	1	.....	.....	.....	.....	.....	.....	.....	2.61	.....	0.78	.....	7	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	15	42.8	+ 8.9	67	13	19	30	38	4.24	+1.02	1.32	0.5	11	3	12	16	nw.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	1	.....	.....	.....	.....	.....	.....	.....	3.99	.....	0.97	1.2	15	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	1	.....	.....	.....	.....	.....	.....	.....	4.62	.....	1.43	1.2	17	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	2	.....	.....	.....	.....	.....	.....	.....	4.67	.....	1.79	1.6	15	.....	.....	.....	nw.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	1	.....	.....	.....	.....	.....	.....	.....	4.94	.....	2.00	T.	.....	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans	Jackson	606	5	45.2	.....	66	13	21	30	28	4.08	.....	.....	0.4	10	7	3	21	.....	B. F. Sayre.
Gary	McDowell	1,426	1	.....	.....	.....	.....	.....	.....	.....	4.40	.....	1.25	2.5	11	.....	.....	.....	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Hinton	..do	1,450	20	40.0	+ 4.4	61	8†	13	30	33	3.20	+0.37	1.24	0.5	12	10	1	20	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	5	40.0	.....	65	10†	10	30	42	5.34	.....	1.85	10.0	17	4	5	22	.....	R. C. Ferguson.
Huntington	Cabell	538	23	43.2	+ 8.8	66	10†	22	30†	33	3.36	+0.18	0.90	1.3	13	8	2	21	w.	L. H. Hutchinson.
Kayford	Kanawha	1,335	1	.....	.....	.....	.....	.....	.....	.....	3.55	.....	0.78	1.0	.....	.....	.....	.....	.....	CabinCreek Con.Coal Co.
Lewisburg	Greenbrier	2,200	17	38.8	+ 6.3	61	8†	6	30	33	3.72	+0.94	1.63	0.2	12	9	5	17	nw.	Geo. T. Argabate.
Logan	Logan	687	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	18	33.8	+ 4.0	56	8	0	30	34	5.18	+2.02	1.05	1.5	12	3	10	18	nw.	S. L. Brown.
Nuttallburg	Fayette	2,252	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Donna Tully.
Point Pleasant	Mason	553	24	46.7[f]	.....	68[f]	13	20[f]	.....	34[g]	4.03	+1.04	1.05	1.6	16	.....	.....	.....	.....	W. D. Holmes.
Powellton	Fayette	933	21	44.2	+ 8.1	65	8†	16	30	31	3.80	+0.96	1.03	1.0	10	6	9	16	w.	J. F. Campbell.
Raleigh	Raleigh	2,130	1	.....	.....	.....	.....	.....	.....	.....	4.44	.....	1.46	.....	10	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	1	.....	.....	.....	.....	.....	.....	.....	3.48	.....	1.60	.....	6	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	17	41.4	+ 7.0	66	10	18	30	37	3.12	−0.49	0.79	T.	11	7	4	20	.....	E. C. Brace, Jr.
Ryan	Roane	700	14	41.6	+ 7.5	68	10	16	30	37	3.99	+0.55	0.96	1.5	14	7	5	19	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	1	.....	.....	.....	.....	.....	.....	.....	3.43	.....	1.05	.....	8	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	13	42.4	+ 7.8	68	10	15	30	37	3.35	+0.15	0.86	3.5	10	5	2	24	.....	A. M. McKown.
Sutton	Braxton	839	11	43.0	+ 9.3	68	9†	20	2	39	5.91	+2.18	1.90	7.0	13	17	4	10	.....	C. B. Eakle.
Union	Monroe	2,250	13	39.6	+ 7.8	68	11	8	30	34	3.86	+1.43	1.35	.....	4	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Ayres.
Williamson	Mingo	660	17	44.1	+ 6.9	70	13	22	30†	35	3.41	−0.52	1.40	T	7	3	7	21	w.	J. F. Keyser.
Averages and	extremes	.....	.....	42.1	+ 7.0	74	15	0	30	44	4.17	+0.71	2.00	1.6	12	7	5	19	nw.	
State averages and	extremes	.....	.....	41.0	+ 7.3	74	15	0	30	45	4.41	+1.00	2.20	3.2	12	8	6	17	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

r Approximated by the observer.

Daily Precipitation for December, 1918.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
nhandle Division.																																	
yard	Potomac									*	.70	T.				.75							.95		.30		T.					T.	2.70
ndywine	do				T.	T.					.92	1.22		.12	*	.10							1.24		.60		T.		.20			T.	4.40
rpers Ferry	do											.35	.35	.18										1.65	T.	.40								2.93
rtinsburg	do									*	.63	1.07		.17	*	.95							1.66		.40		T.	T.					4.88
orefield	do										.85	.87		.04	.40								1.06		.48				.01				3.71
dmont	do				.02					.03	1.11	1.31	.02		.41	.10	.06						1.23		.46	.02		.01	.01			.03	4.82
nney	do				T.	T				1.00	.90	.20		.15		.39							1.38		.20	.36	T.		.10			.03	4.71
per Tract	do				T.	T.				.20	.20	.60			.48								.90		.32				T.	T.		T.	2.70
rdensville	do				T.	T.	T.				.72	.58	.05	.10	.01	.60	T.						.41	.62	.12	.19		T.	T.	T.			3.40
Northern Division.																																	
ns Run	Ohio			.02	.15					.41	.40	.45		.35	.42							.12	.80		.42		.10				.30	3.94
ndonville	Monongahela				*	.50					1.30	.42		.40		*	.72				.45		.70					.40	.24	.16			5.29
ckhannon	do			T.						.60	.70	.90			.60	.05						T.	.65		.30	T.	.08	T.	.08	.08	.08	.80	4.92
atral Station	Middle Is. Creek																																
rtland	Monongahela				.50					.30	1.20	.70			.50	.16						.70						.40			.85	5.31
ston	Little Kanawha				.15	T.				.10	1.35	.33		.10	.04	.71						.10	.55	.06	.04	.15	.06	T.	.02	.02	.01	.20	3.99
vis	Monongahela				.24	.08				.30	1.70	1.20	.15	.17	.22									1.55		T.	.12	.04	.08	.24		2.00	8.09
zabeth	Little Kanawha				.23					.10	1.32	.44		.17		.53										.27	.03		.02				3.11
ins ***	Monongahela			.06	.42	.01	T.			1.02	.26	.68		.01	.59	.01						.01	1.01	T.	.34	.05	.05	T.	.13	.05		1.23	5.93
irmont	do				.18	.10				T.	1.12	.18	.15	.27	.01	.65						T.	.30	.20		.35	.07	T.	T	.06	T.	.02	3.66
nville	Little Kanawha				.15	.10				.08	1.30	.18	T.			.75						T.	.56	.10	T.	T.	T.		.06	.12	.06	.40	3.86
fton	Monongahela			T.	.21					*	1.19	.55		.22	.63								.64		.48	T.	T.	*	*	*		1.00	4.92
st Creek	do			T.	.16					.51	.85	.35	T.	.20	.59	.05						T.	.45	T.	.20	T.	.12	T.	T.	.04		.80	4.32
nnington	do			.04	.30	.03				.32	.79	.31		.36	.48	.23						.03	.55	.02	.14	.15	.14		.05	.06		.20	4.20
rgantown	do																																
ndsville	Ohio			T.						1.10	.56		.47		.42							.77			.55	.04					.57	4.48
w Cumberland	do				.11		T.		T.		.25	.60		.60	.41	.11							.73		.46	T.	.04	T.	.04	.08		.12	3.55
w Martinsville	do			.08	.14					.74	.55	.39		.75	.70	.03						.05	.96		.36	.05	.10					.37	5.27
rkersburg ***	Ohio			.02	.11					.70	.57	.03		.24	.62	.02						.26	.63		.25	03	.05	T.	.03	.04		.63	4.23
rsons	Monongahela				.25					T.	*	*	*	*	*	1.30							.20		T.	T.	.16	.20	.16	.25		1.60	4.62
lippi	do									.10	.75	.50			.40								.65	.15	.65	.10	.16			.31		1.00	4.77
kens	do			T.	.50					1.90	.96	.49			.90							.30	.35		.25	T.	.31		.50	.50		.75	7.71
wlesburg	do				.24	.22				T.	1.48	.92	.32	.25	T.	.48							.35	.52		.44	.12	.04	.03	.12	.05	T.	5.58
nt Marys	Ohio				.18	T.				.20	.45	.52		.32	.03	.45						.04	.80	.05	T.	.18	.10	.03	.04	.06	.06	.05	3.56
ithfield	Fishing Creek				.24	.08				.23	1.08	.27	.09	.36	.05	.65						.05	.65	.03	.04	.27	.20	.04		.20		.12	4.65
rra Alta	Monongahela			T.	.50	.16	T.			.15	1.50	2.20		.31	.34	.21	.01					T.	1.13		.35	.18	.16	.08	.32	.16		.38	8 14
llsburg	Ohio				.22	T.				T.	.95			.55	.40	.16							.89		.56	T.	T.	T	.08			.04	3.85
ston	Monongahela			.15						.45	1.00	.50			.60	.15						.05	.55		.25		.05		.10	.10		.75	4.70
eeling	Ohio				.28	.01					.92	.41	.01	.40	.15	.45						.02	.84	.14	.02	.42	.04	T.	T.	.02	T.	.02	4.15
Southern Division.																																	
ncroft	Great Kanawha				.05						.59	.22	.05	.01		.80							.69	.06	.05	.20	T.		T.	.08		.43	3.23
ckley	do																																
nefield	do				.02	.07				.15	.15	.18	.04		.70	.30	.24	.11				.25	.95	.06			.08		.16		.42	3.88
eading	do				.55						.42	.45		.01	1.00	.03						.05	.80		.20		.01		.05	.04		.79	4.40
nden-on-Gauley	do			10		.04	.04			1.00	.82	1.40			1.00							.30	.40		.80	T	.01	.01	.01	T.		1.40	7.33
arleston	do				T.	T.				T.	.90	.70			.10	1.10	T.					T.							T.	.04	T.	.45	3.29
ay	do				T.	.22					.50	.52	.04	T.		.78							T.	.30					T.	.25			2.61
ba	Sand Creek			T.	.05					1.32	.50	.30		.15	.50	T.						.08	.70		.25	T.	T.	T.	.04	T.		.35	4.24
m 19 O. R.	Ohio				.16	.02				.08	.90	.75		.35	.06	T.							.97	.10		.25	.25	T.	.02	.02	.01	.05	3.99
m 20 O. R.	do				.14	.01				.07	1.43	.50	.02	.24	.08	.64							.90	.10	.04	.24	.01	T.	.04	.04	T.	.12	4.62
m 22 O. R.	do				.12						1.79	.35		.12	.10	.58						.10	.83		.04	.21	.05	.01	.03	.02		.32	4.67
m 26 O. R.	do				T.	T.					.78	.80	.01			2.00						T.	.70	T.	T.	.40	T.		T.	T.		.25	4.94
khorn	Big Sandy																																
ans	Ohio			T.	T.	.10				.56	.34	.36			.67							*	1.26			T.	T.	.04r	T.	T.	.02	.73	4.08
ry	Big Sandy			.40	T.				.02	.15	.25	.18			1.25							.15	.70				T.	T.	T.	.20	.10	1.00	4.40
een Sulpr. Spgs.	Great Kanawha																																
nton	do				.10	T.				.02	.08	.08	.12	.02		.94						.04	1.24	.28		.20	T.		T.	.08		T.	3.20
dcomb	do			*	.40					*	*	*	1.09			*	.64					*	.65		.08	*	.32		*	.31		1.85	5.34
ntington	Ohio				.08					.02	.42	.44			.14	.58						.04	.86	T.	.12	.18	.04		.04	T.		.40	3.36
ylord	Great Kanawha				.29	.04					.24	.34	.17			.78	.20						.74	.12		.32	.03			.10		.18	3.55
wisburg	do				.02					.09	.08	.18		.03	.43	.43						.07	1.63		.19	.03	T.		T.	T.		.54	3.72
gan	Guyandotte																																
dison	Great Kanawha																																
rlinton	do				.12					.22	.16	.54		.12	.78	.26						.70	1.05		.38	T.	T.		T.	.05		.80	5.18
ttaltburg	do																																
int Pleasant	Ohio										1.05	.58	.02	.09	.09	.49						.07	.92	.07	.12	.20	.05	.01	.03	.03	T.	.21	4.03
wellton					.25					.23	.27	.43			1.03							.02	.75		.16		T.		.10			.56	3.80
leigh	Great Kanawha										.55	.24	.06		.40	.40							.70		.25	.03					.35	1.46	4.44
nick	do				.05						.23		.40			.95							*	1.60		.25							3.48
bertsburg	do				.05						.52	.34	.04		.07	.56							.79	.10	.10	.17	T.		T.	T.		.38	3.12
an	do			.01	.03					.31	.36	.46			.96	.07						.08	.57		.27	T.	.08		.06	.01		.72	3.99
sonville	do				T.						.61		.51		T.	1.05							.70				*		*	*		.56	3.43
ncer	Little Kanawha				.06	T.				.14	.80	.15	.04	T.	T.	.86	T.					T.		.65	.37		T.	T.	T.	.08	T.	.20	3.35
tton	Great Kanawha				.20					.32	.58	.65			.67	.15						.12	.70		.30	T.	.08		.16	.08		1.90	5.91
ion	do											.40				1.04							1.07									1.35	3.86
hite Sulphur Spgs.	do																																
lliamson	Big Sandy				.16	T.					.18	.45			T.	1.40						T.	.95	T.	.11				T.	T.		.16	3.41

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
|||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for December, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brandywine	Maximum	47	50	53	48	47	55	50	68	63	64	59	60	55	61	60	47	46	50	52	49	52	52	58	50	45	32	30	34	30	45	45	50.1
	Minimum	23	22	29	27	26	35	20	40	46	47	45	34	40	47	46	37	31	18	18	24	31	43	35	37	32	20	12	17	16	9	26	30.1
Burlington	Maximum	41	47	55	45	39	58	55	67	62	52	39	48	48	49	52	43	45	46	48	40	48	49	56	43	45	34	31	30	32	36	35	45.7
	Minimum	22	19	33	32	30	29	22	52	48	36	35	32	38	38	39	29	22	19	18	21	30	40	36	31	33	29	22	19	25	15	23	29.6
Martinsburg§	Maximum	40	46	52	42	58	44	51	68	64	41	39	49	47	56	54	42	47	45	45	44	52	54	59	44	42	35	34	33	33	36	49	46.5
	Minimum	35	25	26	35	32	31	27	31	45	37	33	33	34	41	45	38	30	27	23	23	27	34	44	37	38	30	27	23	26	20	21	31.5
Moorfield	Maximum	47	55	57	53	47	60	58	69	65	57	44	53	50	49	55	49	41	52	55	45	49	50	61	55	55	36	31	35	33	40	39	49.8
	Minimum	31	21	30	34	31	31	23	50	47	39	38	37	40	38	48	35	26	21	20	24	30	31	35	41	35	29	25	18	26	13	22	31.4
Piedmont	Maximum	39	42	50	39	36	52	49	58	56	54	37	43	43	56	52	40	39	42	44	39	44	49	56	48	45	33	28	32	27	34	35	43.3
	Minimum	31	21	35	30	28	29	24	46	50	35	34	33	39	41	40	34	24	22	23	24	32	32	43	35	22	27	25	18	24	18	25	30.5
Romney	Maximum	44	51	58	59	56	58	58	69	65	60	40	51	50	51	55	58	51	51	55	50	50	54	61	58	41	38	33	32	32	41	40	50.6
	Minimum	34	20	32	32	28	33	22	39	52	34	35	33	38	33	45	35	21	19	19	22	30	35	41	33	36	27	26	20	24	14	22	30.1
Upper Tract	Maximum	41	51	50	54	43	58	55	67	60	58	58	54	55	62	58	....	49	49	54	51	52	50	59	54	45	44	33	32	29	49	49	50.8
	Minimum	28	20	30	31	27	32	23	43	51	36	35	29	32	38	35	....	22	20	20	26	31	42	37	34	30	29	17	17	22	11	13	28.7
Wardensville§	Maximum	41	50	55	39	60	51	56	67	65	40	50	52	56	65	54	....	45	40	43	41	48	53	61	50	39	40	40	32	31	42	....	48.5
	Minimum	32	21	23	21	30	30	22	40	40	40	35	35	32	40	42	34	....	20	20	19	18	22	34	35	33	20	19	18	19	13	15	27.4
Northern Division.																																	
Bens Run	Maximum	41	41	50	45	40	55	58	61	59	56	57	49	66	62	56	59	53	54	62	50	54	56	55	53	34	32	32	30	30	44	56	50.0
	Minimum	28	24	34	32	30	30	27	35	48	48	44	32	32	52	41	34	29	28	28	32	40	49	44	34	30	26	26	24	24	21	34	33.5
Buckhannon	Maximum	39	47	51	40	37	52	56	62	60	67	59	55	66	66	57	45	42	58	57	56	58	56	55	56	51	30	30	30	27	43	49	50.2
	Minimum	29	22	30	29	27	30	24	52	56	55	49	35	44	54	41	34	26	25	25	29	41	52	38	36	27	24	24	25	21	13	29	33.7
Creston	Maximum	43	48	53	44	42	57	58	63	62	66	63	57	65	61	56	48	46	50	56	54	58	56	55	55	52	31	34	33	31	46	49	51.4
	Minimum	24	21	31	33	31	33	25	50	52	55	54	33	45	51	42	33	26	24	25	30	42	51	35	39	31	24	27	29	24	15	31	34.4
Elkins	Maximum	37	48	49	40	54	54	55	59	58	61	55	54	61	67	54	47	51	55	55	55	53	55	52	53	41	26	25	26	22	47	48	48.9
	Minimum	28	21	33	26	24	25	23	54	54	45	41	33	43	42	37	32	23	22	25	28	46	50	38	41	26	21	20	19	19	10	25	31.4
Fairmont§	Maximum	44	50	50	33	55	44	60	62	55	52	55	53	61	62	44	47	50	60	66	52	62	56	52	53	33	27	29	32	27	46	55	49.3
	Minimum	31	21	22	33	29	29	26	31	49	46	47	30	30	48	43	34	28	27	26	26	30	45	38	39	33	26	25	24	23	20	21	31.6
Glenville	Maximum	46	48	55	48	44	60	60	65	63	68	62	58	68	66	57	57	53	60	66	56	59	57	58	59	55	32	36	35	30	53	51	54.4
	Minimum	23	18	33	31	29	30	20	53	49	54	48	32	44	50	43	30	25	22	21	21	38	49	36	35	31	25	25	25	23	12	28	32.4
Grafton	Maximum	39	48	51	43	36	54	56	61	60	55	57	52	62	61	55	46	45	52	58	55	60	57	55	57	54	42	28	29	29	43	49	44.9
	Minimum	30	18	32	29	23	31	23	52	51	45	45	31	43	44	40	33	25	21	23	27	39	52	39	35	30	24	24	22	22	18	37	32.5
Lost Creek	Maximum	43	47	49	42	39	55	56	60	61	63	59	54	65	68	54	45	47	60	65	53	60	56	54	57	54	30	29	28	25	47	50	50.8
	Minimum	18	16	31	29	28	32	19	52	55	54	48	29	43	51	41	35	27	23	20	25	38	53	33	36	29	24	24	23	22	11	28	32.2
Mannington	Maximum	43	46	49	42	37	54	56	61	60	54	55	51	62	58	54	47	48	57	61	49	61	57	54	53	51	30	28	31	29	44	49	49.4
	Minimum	31	19	34	30	29	33	23	54	50	47	45	29	42	43	40	32	24	23	23	25	36	50	35	37	30	25	25	21	23	17	30	32.4
Morgantown	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
New Cumberland	Maximum	39	42	42	39	37	47	54	64	52	43	52	48	61	61	54	40	47	51	57	50	50	56	53	45	45	30	....	31	27	36	46	46.7
	Minimum	29	19	37	29	29	27	20	49	36	38	10	27	33	52	36	28	21	21	22	24	40	40	36	40	20	19	....	21	22	22	31	30.6
New Martinsville	Maximum	47	42	50	45	40	53	57	63	62	54	57	56	65	65	56	52	49	61	63	46	58	57	54	53	53	35	31	33	31	47	49	51.0
	Minimum	28	22	31	32	32	31	26	52	47	46	48	33	42	54	42	34	29	28	26	29	39	51	37	40	31	28	25	23	24	21	35	34.5
Parkersburg	Maximum	45	45	51	42	51	56	59	62	60	65	59	47	67	61	56	50	48	54	58	54	57	57	51	54	42	31	33	32	29	46	50	50.8
	Minimum	29	27	36	30	30	30	29	54	52	53	41	31	43	54	38	35	32	28	30	36	49	44	37	42	30	27	26	27	24	23	42	35.8
Parsons	Maximum	59	52	52	40	35	51	55	59	58	54	57	62	65	68	53	45	56	60	63	40	57	57	59	54	49	29	26	27	25	47	37	49.4
	Minimum	25	12	33	26	26	26	20	30	55	42	42	30	39	38	40	30	21	20	20	23	35	51	35	34	28	23	22	14	20	9	22	28.7
Philippi	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pickens	Maximum	37	....	46	33	46	48	48	58	54	61	53	55	61	65	53	50	50	47	63	57	57	53	51	40	38	30	20	24	21	43	48	47.3
	Minimum	24	....	24	22	21	21	20	44	50	51	41	31	39	48	38	31	22	25	29	35	50	49	49	37	30	18	18	16	15	9	35	31.4
Terra Alta	Maximum	36	52	47	42	34	45	48	54	54	53	48	52	52	63	50	48	47	49	54	49	54	52	51	41	44	25	21	24	22	38	44	44.9
	Minimum	...	...	...	...	...	27	16	46	50	31	30	30	38	42	35	30	24	30	30	30	36	45	40	36	24	19	18	8	16	3	26	29.2
Wellsburg	Maximum	36	45	47	43	38	35	56	61	55	49	54	52	63	66	55	47	47	41	53	40	61	56	55	46	47	32	30	31	30	49	48	47.4
	Minimum	30	26	33	31	29	31	22	50	38	40	43	27	39	48	40	28	23	27	22	25	35	48	32	31	30	27	24	22	22	24	43	32.0
Weston	Maximum	42	52	44	39	57	54	56	68	62	67	60	56	67	68	56	58	49	63	63	51	69	58	57	58	55	32	29	30	30	49	49	52.5
	Minimum	27	32	30	28	35	30	23	54	54	55	48	33	44	54	43	36	28	25	25	29	32	53	37	38	32	24	25	25	25	22	25	34.5
Wheeling§	Maximum	44	46	47	34	51	44	58	66	51	52	54	46	61	59	55	50	47	55	40	42	59	56	50	48	34	30	29	34	28	45	55	47.5
	Minimum	23	24	25	32	30	30	26	31	44	43	43	32	33	46	40	32	30	25	25	25	30	39	35	35	32	27	24	24	24	22	26	30.9
Southern Division.																																	
Beckley	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bluefield	Maximum	40	47	48	44	49	51	53	55	56	61	57	61	62	63	56	50	52	54	50	46	55	55	60	55	50	32	35	30	25	54	48	50.1
	Minimum	24	28	30	27	27	30	28	48	53	50	37	37	47	52	46	38	30	28	34	35	38	45	44	48	33	20	20	22	17	14	38	31.4
Charleston	Maximum	67	65	59	58	59	60	66	68	67	63	64	64	70	72	74	68	64	59	55	56	57	56	54	54	51	50	50	51	56	56	57	60.3
	Minimum	23	25	26	35	30	32	36	37	35	52	39	38	37	39	39	38	37	39	31	31	32	39	40	41	38	35	35	33	24	19	....	34.6
Elkhorn	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Green Sulphur Spgs.	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hinton§	Maximum	43	51	52	35	53	48	49	61	60	61	47	59	61	61	51	51	50	52	50	47	50	58	56	49	37	29	36	34	27	29	45	48.1
	Minimum	27	25	25	26	24	30	26	28	44	50	41	41	42	46	50	35	34	28	27	27	31	42	40	41	35	26	24	27	21	13	16	32.0
Holcomb§	Maximum	40	50	52	30	51	43	52	60	56	65	58	63	63	65	58	50	55	58	55	52	55	53	57	52	33	26	35	34	27	52	55	50.2
	Minimum	26	21	24	25	23	24	22	39	42	49	40	33	34	44	47	34	28	23	25	37	41	42	40	37	30	20	20	22	18	10	14	29.8
Huntington§	Maximum	45	48	54	38	59	42	62	63	64	66	63	66	66	58	45	52	47	52	56	55	60	59	52	57	34	31	36	31	28	49	55	51.4
	Minimum	29	26	30	35	31	35	30	35	55	56	54	35	39	55	43	35	32	28	28	28	40	47	39	41	32	27	27	27	25	22	22	35.1
Lewisburg	Maximum	39	48	50	45	47	50	45	61	58	59	50	51	55	61	53	53	52	52	49	44	45	57	55	51	41	29	32	29	25	39	36	47.2
	Minimum	26	21	26	26	25	28	23	33	53	49	37	38	40	42	45	36	24	23	23	26	38	44	34	40	28	21	22	23	17	6	24	30.4
Marlinton	Maximum	38	44	40	34	40	48	42	56	54	54	40	48	46	54	48	46	50	44	46	40	40	52	50	42	40	25	26	26	22	34	34	42.1
	Minimum	24	16	24	24	22	28	18	30	50	36	34	34	32	40	40	30	29	16	16	20	32	38	30	34	26	20	14	20	6	0	18	25.5
Point Pleasant	Maximum	49	47	55	50	46	60	50	64	61	65	64	60	68	57	56	55	50	57	59	55	60	67	57	55	...	...	...	...	...	48	...	56.6
	Minimum	26	24	33	33	30	38	25	49	55	54	50	32	44	53	42	31	28	25	25	31	43	51	35	41	...	...	...	...	...	20	...	36.8
Powellton	Maximum	44	49	54	55	42	56	59	65	65	65	65	57	64	65	56	45	43	45	52	52	55	54	51	55	55	33	34	33	31	37	48	51.3
	Minimum	28	27	34	33	31	36	28	50	56	54	46	43	49	52	45	40	31	28	34	39	48	46	44	41	32	27	27	29	23	16	32	37.1
Robertsburg§	Maximum	47	45	45	37	60	48	60	64	61	66	64	55	60	56	45	51	48	45	62	55	55	58	55	58	33	32	38	34	30	52	56	50.8
	Minimum	25	24	25	25	30	31	25	31	54	50	50	34	33	45	43	35	27	25	25	26	38	50	31	40	32	27	27	27	24	18	19	32.9
Ryan	Maximum	50	50	55	44	45	46	58	65	61	68	61	55	56	55	55	50	46	56	57	52	53	56	55	55	52	31	34	32	30	47	50	51.0
	Minimum	20	18	25	32	25	30	21	46	52	49	39	31	46	51	42	31	24	21	20	31	43	51	31	37	31	26	26	29	22	16	30	32.1
Spencer§	Maximum	45	47	45	35	58	45	60	64	62	68	61	58	67	62	44	50	50	57	60	55	60	60	57	57	33	30	35	32	30	48	55	51.3
	Minimum	25	21	35	33	30	30	24	39	55	55	48	32	31	57	42	35	25	24	23	32	39	40	35	46	32	25	25	27	25	15	35	33.5
Sutton	Maximum	44	48	48	46	44	44	58	63	68	68	67	58	66	66	58	58	55	58	58	60	63	64	65	65	62	32	34	34	30	60	62	55.0
	Minimum	21	20	22	22	28	30	22	41	42	51	17	32	42	44	42	41	22	24	22	26	36	37	38	36	30	24	25	26	21	21	26	31.1
Union§	Maximum	47	48	52	51	47	53	52	55	56	60	68	50	59	60	63	57	57	49	50	46	48	50	57	58	50	31	32	32	28	42	40	50.2
	Minimum	25	21	26	27	25	30	22	30	35	37	37	37	40	41	38	35	26	23	23	27	38	35	34	40	28	22	21	24	20	8	25	29.0
White Sulphur Spgs.	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Williamson§	Maximum	47	52	60	38	62	51	59	67	64	63	64	59	70	60	47	47	44	58	62	55	62	60	60	67	35	30	40	36	31	51	47	53.2
	Minimum	25	25	25	28	32	32	30	33	53	53	51	40	42	50	44	40	31	30	30	32	43	51	42	42	33	26	26	27	24	22	22	35.0

§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

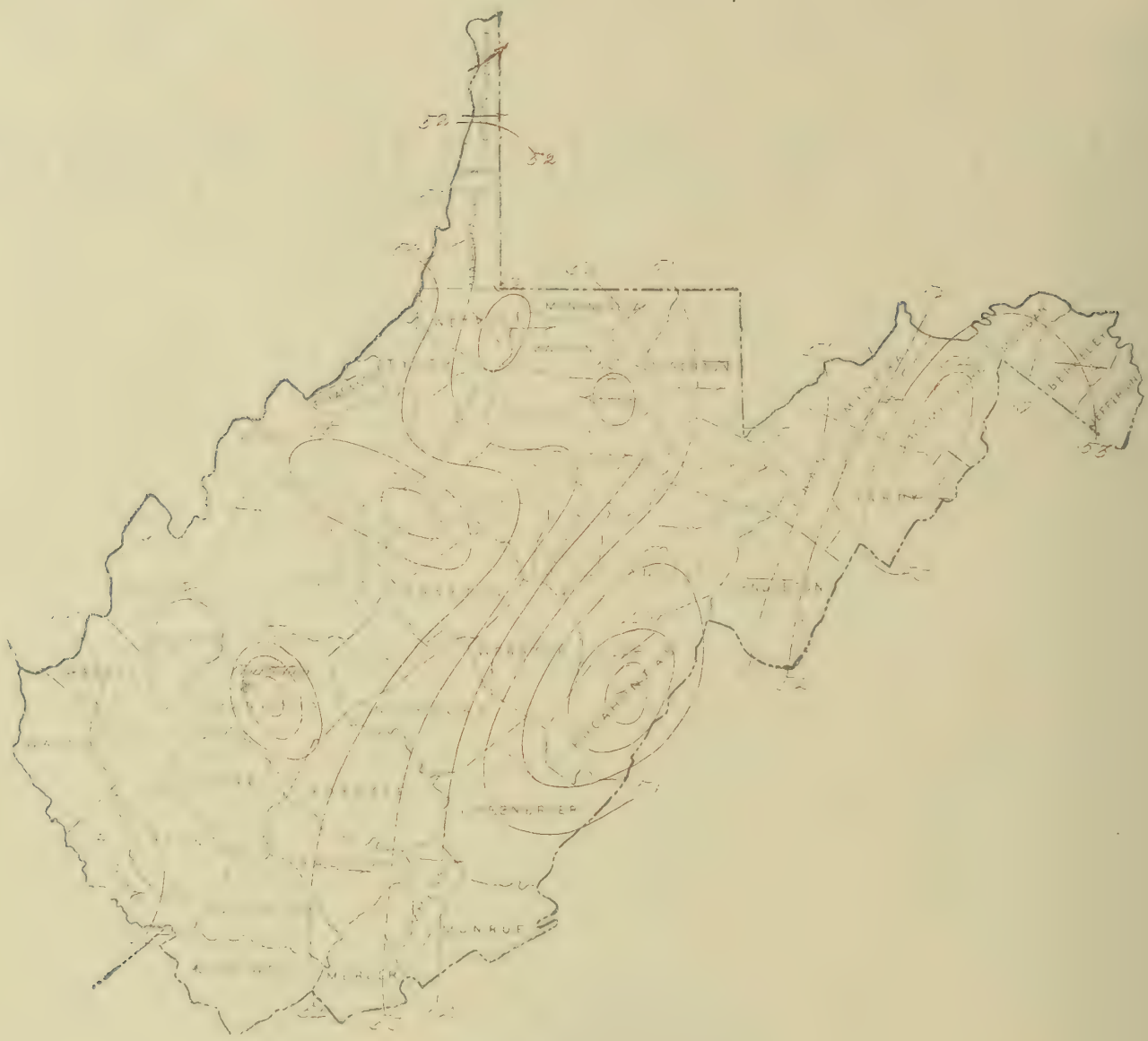
WEST VIRGINIA SECTION

ANNUAL, 1918

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MARCH 20, 1919

MEAN ANNUAL ISOTHERMS AND PREVAILING WINDS. 1918



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

Vol. XXVI. PARKERSBURG, W. VA., YEAR, 1918. No. 13.

GENERAL SUMMARY.

The temperature for 1918 averaged only slightly above the normal, but the year was characterized by extremes in monthly temperatures. Considering the State records, which go back to 1890, January was by far the coldest month of record, May was abnormally warm, July was the coolest July since 1891, the highest temperatures of record occurred in August, September was the coolest September of record, and December was the warmest December of record.

The precipitation averaged considerably above the normal, April, May, October, and December being wet. The snowfall was moderately heavy in January, exceptionally light in February and March, and the heaviest of April record in April. Excessive local rains and floods occurred in March and May. The summer was dry and generally droughty.

While January and the early part of February were exceptionally cold, the conditions were generally favorable for winter grains, owing to a good snow cover; but these grains were in fair to poor condition in the early spring, owing to unfavorable conditions in December. The winter of 1917-8 was decidedly unfavorable for peaches. Although there were local light frosts in June, growth was continuous in the agricultural districts after May 2. Owing to drought the summer was generally unfavorable for crops, especially potatoes. Heavy to killing frosts occurred during the second decade in September, making the season of growth somewhat shorter than usual. The last three months were especially favorable for maturing crops, late growth, grazing, and farm work.

The average cloudiness was somewhat below the normal. The sunshine at Parkersburg averaged 46 per cent of the possible amount, or 1 per cent above the normal, and the average at Elkins was 46 per cent, or 2 per cent above the normal.

The wind movement at Parkersburg was 47,061 miles and at Elkins, 47,400 miles.

THE WEATHER BY MONTHS.

January.—January, 1918, was by far the coldest month of record for West Virginia, the average temperature, 20.7°, being 1.9° below the average for the cold January in 1893, the second coldest month of record for the State. The temperature was above the normal for only three or four days. This month was the fifth consecutive month of abnormally cold weather. The precipitation was mostly snow or sleet and averaged slightly above the normal, with a favorable distribution throughout the State and during the month. Owing to a good snow cover, the conditions were favorable for winter grains.

February.—February was considerably warmer and slightly drier than usual and was the first month with the temperature normal or above since January, 1917, the longest period of record for the State with the monthly temperatures below the normal. The precipitation was well distributed throughout the month but the amounts received in the eastern and most of the southern counties were much deficient. The snowfall was the lightest of record for February, except in 1909 and 1915. During the severe cold weather early in the month the ground was well covered with snow. Seasonally warm weather and frequent showers after the 10th were favorable for winter grains, fruit, and farm work. However, owing to lack of snow cover during cold periods in December, wheat and rye were generally in poor condition at the close of the month.

March.—March was sunshiny, considerably warmer, and somewhat wetter than usual, with the rainfall poorly distributed over the State. The snowfall was exceptionally light, no snow being received at many stations and measureable amounts only in the northern or more elevated localities. There were but three or four days with the temperature much below the normal, and the month was considered one of the most favorable of March record. Heavy rains, however, over the central counties caused marked local floods and much damage resulted, especially to coal and lumber interests. At the close of the month plowing was progressing rapidly, pastures and meadows were green, and winter wheat and rye were in fair to good condition.

April.—April was exceptionally cloudy, cool and abnormally wet, with the heaviest snowfall of April State record. While the temperature was below the normal for the greater part of the month, there were no exceptionally cool periods. The rainfall was well distributed. From the 9th to the 12th the snowfall ranged from about three inches to nearly three feet, the greatest amounts being received over the eastern panhandle counties. The soil was wet and cold during most of the month; but farm work and growth were generally well advanced at the close of the month and the condition of winter grains was generally good, owing to favorable weather during March. Peaches were winter-killed in many localities.

May.—May was abnormally warm, the conditions after the 2d being much the same as those for the average June. While the temperatures were near or slightly below freezing on the 2d, there was practically no frost damage. The rainfall was heavy over the northern counties west of the crest of the mountains. In the southern part of Doddridge County seven people were drowned in the early morning of the 8th as a result of a cloudburst. Excessive rains on the 25th over the upper portions of the West Fork, Elk, and Little Kanawha basins caused destructive local floods. All crops made excellent growth and were in good condition at the close of the month.

June.—June was cool and slightly drier than usual, with an unfavorable rainfall distribution. Over the southeastern districts the rainfall was heavy, delaying harvesting and cultivation, while in the northwestern and eastern counties the conditions were droughty most of the month. The coolest weather of record in many districts for the last decade in June occurred on the 23d-24th, when light frosts were noted in exposed places in the northern and central counties and heavy to damaging frosts in localities of Grant, Preston, and Tucker counties. The

harvesting of wheat and rye was well advanced at the close of the month, with near the average yield.

July.—This month was the coolest July since 1891. On the 9th the temperatures were near the frost line in many of the more elevated localities and the July low temperature records for the State were nearly equalled or broken. Drought conditions were severe over the western and most of the northern counties, causing much damage to crops, especially potatoes. Corn was short and patchy, owing to poor seed and continued cool weather, and the wheat and rye yields were reduced one-third by the unfavorable conditions. The weather, however, was favorable for harvesting.

August.—The month was exceptionally warm. The highest temperatures of record occurred at practically all stations and the average for the month, 76°, was the highest for any August, except in 1900, when the average was also 76°. Droughty conditions over the western and northern counties continued until into the last week of August, when soaking rains were general. Owing to the drought the potato crop was nearly a failure in many counties, corn was considerably injured, and pastures were dried up.

September.—This was the coolest September of record for West Virginia. After the 4th, except two or three days, the temperature was continuously below the normal. Damaging frosts did not occur, however, until the 22d. Heavy to killing frosts also occurred on the 23d, 27th, and 28th; but heavy fogs protected most of the agricultural districts, where growth continued until the close of the month, when there was much unripe corn.

October.—This month was warm, pleasant, and exceptionally favorable for late growth and farm work. While the rainfall averaged considerably above the normal, the month was dry in most sections until the 25th. Although killing frosts were general on the 22d, pastures and meadows continued green, and at the close of the month winter grains were in excellent condition, with large acreages. The conditions were nearly perfect for the maturing and curing of corn.

November.—This month was considerably drier and slightly warmer than usual, without marked extremes in temperature. Exceptionally pleasant weather prevailed for the first fifteen days, when cloudiness set in and continued until the 25th. While the rainfall was light and unimportant until near the close of the second decade, there was sufficient moisture for growth, owing to heavy rains at the close of October. Apples were marketed without loss from freezing, pastures continued in good condition, and the stand of winter grains was good at the close of the month.

December.—This month was the warmest December of State record, or since 1890. The weather was seasonally warm and the conditions especially favorable for winter grains, grazing, and farm work until into the last decade, when moderately cool weather, without sufficient snow cover, prevailed for a few days. The precipitation was considerably above the normal and well distributed and was mostly rain in the agricultural districts.

CORRECTIONS.

May, 1917, p. 35.—Under "Precipitation," the departure (for the State), printed −1.05, should be −1.05. In table, "Comparative Data," 1917 line, Precipitation, greatest, printed 5.45, should be 8.45. P. 36, State averages line, Precipitation, total, printed 4.38, should be 4.88.

Year, 1917, p. 100.—In table, "Temperature and Precipitation, 1917," column Precipitation, Average: May, printed 4.38, should be 4.88; Annual, printed 43.56, should be 44.06. P. 103, May precipitation, Upper Tract, left blank, should be 3.23. Annual precipitation, White Sulphur Springs, should be 43.39. Annual precipitation, Williamson, should be 49.12.

Dates on which First and Last Killing Frost Occurred or Minimum Temperature Fell to 32 Degrees.

Station.	Last in Spring.	First in Autumn.	Station.	Last in Spring.	First in Autumn.
Bancroft	May 2	Oct. 22	Morgantown	April 13	.....
Bayard	May 2	.....	Moundsville	May 2	Sept. 26
Beckley	May 2	Sept. 22	New Cumberland	May 2	Sept. 22
Bens Run	April 14	Nov. 3	New Martinsville	May 2	Oct. 15
Bluefield	May 2	Sept. 22	Parkersburg	April 14	Nov. 3
Brandywine	May 2	Sept. 22	Parsons	May 3	Sept. 27
Breading	May 2	Oct. 15	Philippi	May 2	Sept. 23
Buckhannon	May 2	Sept. 23	Piedmont	April 12	Oct. 22
Burlington	May 2	Sept. 28	Pickens	May 2	Sept. 22
Charleston	April 15	Nov. 3	Point Pleasant	May 2	Oct. 15
Creston	May 2	Sept. 27	Powellton	.....	Nov. 3
Cuba	May 2	Oct. 15	Robertsburg	May 2	Oct. 15
Elkins	May 2	Sept. 27	Romney	April 28	Oct. 9
Evans	April 10	Sept. 27	Ryan	May 2	Sept. 23
Fairmont	May 2	Sept. 27	Smithfield	May 2	Sept. 22
Glenville	May 2	Sept. 27	Spencer	May 2	Sept. 27
Grafton	May 2	Sept. 27	Sutton	May 3	Oct. 15
Green Sulphur Springs	May 3	Oct. 14	Terra Alta	May 2	Sept. 22
Hinton	April 15	Nov. 3	Union	May 1	Sept. 22
Holcomb	May 3	Sept. 23	Upper Tract	May 2	Sept. 22
Huntington	April 11	Nov. 3	Wardensville	April 16	Sept. 28
Lewisburg	May 2	Sept. 22	Wellsburg	May 2	Sept. 27
Lost Creek	May 2	Sept. 22	Weston	May 2	Sept. 27
Mannington	May 2	Sept. 22	Wheeling	May 3	Oct. 15
Marlinton	May 3	Sept. 22	White Sulphur Spgs	May 3	Sept. 27
Martinsburg	April 13	Oct. 22	Williamson	April 15	Nov. 2
Moorefield	May 2	Sept. 22			

COMPARATIVE ANNUAL DATA FOR WEST VIRGINIA.

Year	Temperature			Precipitation
	Mean	Highest	Lowest	
1891	52.0	...	....	45.96
1892	52.1	99	−12	38.33
1893	52.0	99	−25	39.82
1894	53.5	103	−29	34.52
1895	51.5	107	−21	32.82
1896	53.6	97	−10	43.49
1897	53.5	103	−18	41.59
1898	54.8	103	−13	47.61
1899	53.2	100	−35	40.97
1900	54.1	104	−11	37.62
1901	52.1	104	−11	44.78
1902	52.8	104	−14	42.19
1903	52.0	105	−19	40.55
1904	50.9	98	−20	33.33
1905	52.3	100	−22	45.53
1906	54.0	101	−11	44.36
1907	51.7	98	−23	52.15
1908	53.7	101	−16	40.47
1909	53.0	101	−10	43.02
1910	52.3	98	−11	38.60
1911	54.6	106	− 5	47.13
1912	51.7	100	−34	43.78
1913	53.9	103	− 4	49.02
1914	52.3	106	−22	39.71
1915	52.8	101	− 8	43.76
1916	52.6	104	−18	44.63
1917	49.9	104	−37	44.33
1918	53.2	110	−27	44.77

TEMPERATURE AND PRECIPITATION FOR WEST VIRGINIA 1918.

Month	Temperature in degrees Fahrenheit				Precipitation in inches				Sky			Prevailing direction of the wind.
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest local amount	Number of rainy days	Clear	Pt. Cloudy	Cloudy	
January	20.7	−12.3	55	−27	4.24	+0.32	2.22	14	8	5	18	w.
February	35.4	+ 3.7	81	− 19	3.12	−0.05	2.04	9	11	6	11	w.
March	46.4	+ 4.0	85	9	4.26	+0.12	4.80	9	16	5	10	w.
April	50.3	− 1.2	85	18	5.11	+1.54	3.33	15	9	7	14	w.
May	66.7	+ 4.6	97	25	4.34	+0.74	2.85	11	15	9	7	w.
June	68.2	1.0	99	34	4.17	0.24	4.01	8	16	7	7	w.
July	70.3	− 3.1	101	38	3.18	−1.19	3.86	8	17	7	7	w.
August	76.0	+ 4.0	110	41	3.96	−0.01	3.02	9	17	8	6	w.
September	60.5	5.8	93	24	2.92	−0.01	2.60	8	15	7	8	w.
October	58.2	+ 3.2	89	20	3.68	+0.87	2.56	8	15	7	9	w.
November	42.9	+ 0.2	79	12	1.89	−0.55	2.00	6	13	5	12	w.
December	41.0	+ 7.3	74	0	4.41	+1.09	2.20	12	8	6	17	w.
Annual	53.0	+ 0.3	110	−27	3.77	+2.54	4.80	117	160	79	126	w.

CLIMATOLOGICAL DATA FOR THE YEAR 1918

Stations.	Counties.	Elevation, feet.	Temperature (degrees Fahrenheit).						Precipitation (inches).							Number rainy days.	Sky.			Prevailing direction of wind.
			Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.	Total snowfall.		Number clear days.	Number partly cloudy days.	Number cloudy days.	
PANHANDLE DIVISION.																				
Bayard	Grant	2,700	17	.....	.....	.....	−12	Jan. 3	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	w.
Brandywine	Pendleton	.....	3	51.8	101	Aug. 6	−20	Jan. 21	3	41.09	5.44	June	1.07	Feb.	27.8	104	216	38	111	s.
Burlington	Mineral	875	25	51.1	105	Aug. 5	−21	Jan. 21	25	38.85	6.50	Apr.	0.98	Nov.	54.0	82	125	184	56	w.
Harpers Ferry	Jefferson	244	.....	.....	.....	.....	.....	.....	30	34.59	6.52	Apr.	0.70	Feb.	32.5	72	.....	.....	.....	.....
Martinsburg	Berkeley	435	26	52.8	107	Aug. 6	− 4	Jan. 21	27	43.17	8.62	Apr.	1.10	Nov.	.....	99	193	90	82	w.
Moorefield	Hardy	900	23	54.8	109	Aug. 6	−24	Jan. 15	23	37.17	7.26	Apr.	0.87	Feb.	62.1	88	.....	.....	.....	.....
Piedmont	Mineral	919	3	51.5	104	Aug. 6	−11	Jan. 21	3	42.40	6.75	Apr.	0.93	Nov.	.....	129	.....	.....	.....	se.
Romney	Hampshire	824	22	54.0	109	Aug. 6	−15	Jan. 21	22	42.92	9.14	Apr	1.17	Nov.	64.0	.....	.....	.....	.....	.....
Upper Tract	Pendleton	1,230	21	52.0	101	Aug. 6	−13	Jan. 3	21	36.86	6.30	Apr.	1.30	Nov.	.....	.....	.....	.....	.....	w.
Wardensville	Hardy	1,200	1	.....	105	Aug. 6	.....	.....	1	.....	7.30	Apr.	0.45	Feb.	.....	.....	.....	.....	.....	w.
Averages and extremes	.....	.....	.....	52.6	109	Aug. 6	−24	Jan. 15	.....	39.63	9.14	Apr.	0.45	Feb.	48.1	96	178	104	83	w.
NORTHERN DIVISION.																				
Bens Run	Pleasants	622	18	54.5	105	Aug. 6	−15	Jan. 21	18	43.06	6.97	May	1.69	July	50.5	118	232	51	82	.....
Buckhannon	Upshur	1,411	23	52.8	99	Aug. 7	−15	Jan. 4	30	58.68	7.78	May	2.15	Nov.	37.0	118	187	60	118	.....
Cortland	Tucker	3,300	.....	.....	.....	.....	.....	.....	4	48.98	6.40	Feb.	1.50	Nov.	59.0	86	.....	.....	.....	.....
Creston	Wirt	701	18	55.0	104	Aug. 6	−18	Jan. 3	18	41.04	4.86	Mar.	2.21	Sept.	24.3	133	162	25	178	sw.
Davis	Tucker	3,093	.....	.....	.....	.....	.....	.....	11	46.86	8.09	Dec.	1.19	July	77.0	110	.....	.....	.....	sw.
Elizabeth	Wirt	646	.....	.....	.....	.....	.....	.....	8	43.07	6.04	Aug.	1.70	June	.....	113	.....	.....	.....	.....
Elkins	Randolph	1,940	19	50.5	99	Aug. 6	−15	Jan. 21	19	51.28	5.93	Dec.	1.60	Nov.	44.7	171	60	119	186	w.
Fairmont	Marion	883	14	52.9	108	Aug. 7	−12	Jan. 4	27	41.14	5.22	May	1.91	June	35.5	154	223	29	113	w.
Glenville	Gilmer	738	26	56.0	107	Aug. 6	−20	Jan. 3†	32	47.51	5.79	May	2.18	Nov.	23.0	118	184	108	73	w.
Gratton	Taylor	1,000	26	53.7	104	Aug. 6	−14	Jan. 4	26	49.34	6.90	July	2.00	Nov.	.....	.....	.....	.....	.....	e.
Lost Creek	Harrison	1,026	22	52.9	102	Aug. 6†	−21	Jan. 4	22	47.58	6.50	May	1.93	Sept.	28.0	119	170	69	126	w.
Mannington	Marion	974	17	52.2	101	Aug. 6	−20	Jan. 3	17	42.95	7.01	May	1.09	June	27.8	166	137	81	147	w.
Morgantown	Monongalia	1,250	27	.....	104	Aug. 7	− 9	Jan. 4	46	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	sw.
Moundsville	Marshall	642	17	.....	107	Aug. 5	−17	Jan. 21	17	.....	7.99	May	.....	.....	.....	.....	.....	.....	.....	sw.
New Cumberland	Hancock	987	22	51.0	109	Aug. 6	−18	Jan. 20†	22	31.80	4.45	Aug.	0.87	June	36.0	115	.....	.....	.....	sw.
New Martinsville	Wetzel	634	26	54.6	109	Aug. 6	−18	Jan. 21	26	40.74	7.45	May	1.45	Sept.	.....	120	190	48	127	s.
Parkersburg	Wood	638	31	54.5	106	Aug. 6	−10	Jan. 21	31	38.18	5.14	Aug.	1.28	July	29.5	149	123	89	153	se.
Parsons	Tucker	1,656	20	51.0	101	Aug. 7	−14	Jan. 3	20	41.93	5.28	Feb.	1.81	July	53.4	.....	157	79	129	.....
Philippi	Barbour	1,149	23	.....	98	Aug. 6	.....	.....	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pickens	Randolph	2,697	17	.....	.....	.....	− 9	Feb. 5	17	.....	10.28	May	.....	.....	100.0	.....	.....	.....	.....	w.
Rowlesburg	Preston	1,375	.....	.....	.....	.....	.....	.....	33	59.00	8.24	June	3.33	Nov.	.....	147	.....	.....	.....	w.
Saint Marys	Pleasants	577	.....	.....	.....	.....	.....	.....	11	43.45	6.37	May	2.08	June	.....	136	.....	.....	.....	sw.
Smithfield	Wetzel	835	14	51.2	106	Aug. 6	−19	Feb. 5	14	48.30	6.41	May	2.53	July	44.0	166	220	68	77	se.
Terra Alta	Preston	2,612	19	.....	94	Aug. 7	−14	Feb. 5	19	.....	8.14	Dec.	1.35	Feb.	.....	.....	.....	.....	.....	w.
Wellsburg	Brooke	1,225	19	.....	106	Aug. 6	.....	.....	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	w.
Weston	Lewis	1,026	24	54.4	102	Aug. 7	−14	Jan. 4	31	.....	5.50	May	2.25	Sept.	.....	.....	.....	.....	.....	.....
Wheeling	Ohio	645	33	52.8	110	Aug. 6	−14	Jan. 21†	35	36.34	4.71	May	1.52	July	37.3	146	165	71	129	sw.
Averages and extremes	.....	.....	.....	53.1	110	Aug. 6	−21	Jan 4	.....	45.06	10.28	May	0.87	June	44.2	132	170	69	126	w.
SOUTHERN DIVISION.																				
Bancroft	Putnam	574	15	53.6	102	Aug. 6	−11	Jan. 3	15	37.93	4.83	Jan.	1.57	Nov.	21.2	113	226	14	125	ne.
Beckley	Raleigh	2,440	19	.....	93	Aug. 5†	−13	Jan. 4	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	w.
Bluefield	Mercer	2,558	24	53.2	96	June 21†	− 4	Jan. 13†	24	42.20	6.05	June	1.61	Nov.	29.4	129	182	88	95	.....
Breading	Mingo	507	0	.....	103	Aug. 6	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Camden-on-Gauley	Webster	2,062	.....	.....	.....	.....	.....	.....	2	77.07	9.15	Aug.	3.10	July	36.5	121	.....	.....	.....	s.
Charleston	Kanawha	597	16	57.8	108	Aug. 6	− 9	Jan. 4	33	53.76	6.85	Mar.	2.25	Nov.	21.0	106	.....	.....	.....	w.
Clay	Clay	706	3	.....	.....	.....	.....	.....	3	31.05	5.82	July	0.89	June	.....	.....	.....	.....	.....	.....
Cuba	Jackson	650	17	54.5	103	Aug. 6	−23	Jan. 3	17	36.99	4.87	Apr.	1.20	Sept.	22.5	99	126	163	76	w.
Dam 19 O. R.	Wood	557	.....	.....	.....	.....	.....	.....	2	43.86	5.54	May	1.71	July	.....	141	.....	.....	.....	.....
Dam 20 O. R.	Wood	551	.....	.....	.....	.....	.....	.....	1	39.29	4.62	Dec.	1.36	July	.....	132	.....	.....	.....	.....
Dam 22 O. R.	Jackson	538	.....	.....	.....	.....	.....	.....	3	40.37	4.94	Mar.	1.37	Sept.	22.9	114	.....	.....	.....	.....
Dam 26 O. R.	Mason	505	.....	.....	.....	.....	.....	.....	2	36.21	5.13	Apr.	0.63	Aug.	.....	.....	.....	.....	.....	.....
Elkhorn	McDowell	1,933	26	.....	.....	.....	− 3	Jan. 4	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Evans	Jackson	606	5	55.3	102	Aug. 6	−14	Jan. 4	5	42.33	4.44	Mar.	1.24	July	24.4	109	.....	.....	.....	.....
Gary	McDowell	1,426	.....	.....	.....	.....	.....	.....	1	54.60	6.56	Jan.	0.87	Nov.	.....	132	.....	.....	.....	.....
Green Sulphur Springs	Summers	1,600	23	.....	.....	.....	−11	Jan. 21	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hinton	Summers	1,450	22	53.1	99	Aug. 6†	− 6	Jan. 4	30	48.48	6.02	Oct.	1.22	Nov.	26.5	135	125	23	217	w.
Holcomb	Nicholas	2,042	7	.....	101	Aug. 7	−12	Jan. 21	7	60.95	9.37	Mar.	2.38	Nov.	41.0	142	136	75	154	s.
Huntington	Cabell	538	23	55.1	105	Aug. 6	− 2	Jan. 4†	24	37.63	4.96	Apr.	1.12	Nov.	22.1	128	153	22	190	.....
Kayford	Kanawha	1,335	.....	.....	.....	.....	.....	.....	2	47.80	6.32	Apr.	1.89	Nov.	.....	.....	.....	.....	.....	w.
Lewisburg	Greenbrier	2,200	19	51.3	96	Aug. 6†	−18	Jan. 21	19	50.75	7.41	June	1.50	Nov.	34.7	110	175	75	115	.....
Marlinton	Pocahontas	2,131	20	46.6	95	Aug. 5	−27	Jan. 21	20	63.62	10.11	June	1.92	Nov.	46.0	150	58	176	131	nw.
Point Pleasant	Mason	553	26	.....	106	Aug. 6	−14	Jan. 3†	26	38.29	4.91	June	1.44	Aug.	27.6	106	.....	.....	.....	sw.
Raleigh	Raleigh	1,653	.....	.....	.....	.....	.....	.....	2	47.05	5.54	Jan.	1.89	Nov.	.....	117	.....	.....	.....	.....
Renick	Greenbrier	1,653	.....	.....	.....	.....	.....	.....	3	50.10	6.95	Mar.	1.47	Nov.	.....	85	.....	.....	.....	nw.
Robertsburg	Putnam	574	19	54.0	106	Aug. 6	−16	Jan. 4	19	36.51	4.87	Mar.	1.41	Nov.	15.0	117	.....	.....	.....	.....
Ryan	Ryan	700	16	.....	100	Aug. 6	−24	Jan. 3	16	41.15	5.71	Mar.	1.81	Nov.	31.4	146	158	83	124	.....
Spencer	Roane	784	14	54.1	104	Aug. 6	−24	Jan 3†	20	43.84	7.40	Mar.	1.41	July	.....	.....	40	199	126	.....
Sutton	Braxton	839	12	54.2	100	Aug. 7†	−14	Jan. 4	17	58.71	7.78	Mar.	2.40	Sept.	44.4	119	233	71	61	.....
Union	Monroe	2,250	15	.....	.....	.....	−16	Jan. 1	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
White Sulphur Springs	Greenbrier	1,940	9	.....	96	Aug. 5†	−19	Jan. 21	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Williamson	Mingo	660	19	55.7	99	Aug. 16	0	Jan. 4	19	39.01	5.75	Jan.	1.24	Nov.	20.3	111	130	109	126	w.
Wilsondale	Wayne	.....	0	.....	.....	.....	−12	Jan. 3†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Averages and extremes	.....	.....	.....	53.7	108	Aug. 6	−27	Jan. 21	.....	46.14	10.11	June	0.63	Aug.	28.6	121	145	92	128	w.
State averages and extremes	.....	.....	.....	53.2	110	Aug. 6	−27	Jan. 21	.....	44.77	10.28	May	0.45	Feb.	37.7	122	160	83	122	w.

* 1 day interpolated from nearby stations.

† And other dates.

Monthly and Annual Mean Temperatures for the Year 1918, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September		October.		November		December.		Annual.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
PANHANDLE DIVISION																										
Bayard	15.6	−13.4	30.6	+3.4	40.6	+3.3	44.2	−2.6	62.4	+5.3	62.6	−0.9	63.2	−4.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brandywine	20.4	.....	35.2	.....	46.4	.....	49.0	.....	65.0	.....	65.8	.....	67.7	.....	73.1	.....	58.8	.....	56.8	.....	43.2	.....	40.1	.....	51.8	.....
Burlington	19.0	−12.2	32.4	+2.3	44.8	+3.9	49.1	−1.1	66.2	+4.7	66.2	−2.2	69.3	−3.5	73.2	+2.0	59.4	−5.3	55.4	+1.9	39.9	+1.4	37.6	+5.0	51.1	−0.3
Martinsburg	19.1	−11.9	32.2	+2.6	45.1	+4.2	50.3	+0.2	68.9	+5.6	69.3	−1.4	73.0	−2.6	76.1	+3.0	61.2	−5.3	56.4	+2.0	43.6	+0.1	39.0	+6.0	52.8	+0.2
Moorefield	20.2	−12.2	36.7	+5.1	48.6	+5.2	51.5[a]	−0.7	70.2[c]	+7.1	69.8	+0.6	72.2[b]	−1.7	77.8	+4.9	65.0[f]	−1.8	60.9	+6.2	44.4	+0.9	40.6	+7.3	54.8	+1.7
Piedmont	19.6	.....	33.2	.....	45.9	.....	50.6	.....	68.8	.....	67.4	.....	69.8	.....	73.8	.....	60.0	.....	54.0	.....	40.2	.....	36.9	.....	51.5	.....
Romney	19.2[i]	−12.2	36.3	+4.7	47.3[a]	+5.1	52.4	+1.2	69.4	+6.8	69.4	−0.6	72.1[b]	−3.1	77.1[a]	+4.3	63.4[f]	−3.3	58.8	+4.0	42.0[e]	−0.6	40.4	+8.1	54.0	+1.2
Upper Tract	20.0	−14.3	36.2	+4.0	47.0[a]	+4.1	48.6	−2.9	65.6	+3.8	66.4[c]	−1.3	67.3[a]	−5.1	74.0[a]	+3.0	58.9	−6.3	57.5	+1.9	43.0[i]	+0.4	39.8[k]	+5.9	52.0	−0.6
Wardensville	.....	.....	36.6	.....	45.5[b]	.....	48.8[b]	.....	65.6[b]	.....	66.6	.....	70.6	.....	74.7	.....	59.6	.....	56.4[a]	.....	41.6[c]	.....	38.0[b]	.....	.....	.....
NORTHERN DIVISION																										
Bens Run	20.2	−12.6	36.2	+4.9	46.6	+3.7	52.4	+0.1	68.8	+5.2	69.6	−0.6	72.4	−2.9	78.6	+4.9	62.6	−5.5	60.2	+3.9	44.4	+1.2	41.8	+8.6	54.5	+0.9
Buckhannon	22.3	−10.2	37.2	+6.1	45.6	+6.1	50.4	−0.6	66.2	+4.0	67.5	−1.1	69.7	−2.7	74.4	+3.3	58.6	−5.8	57.5	+4.4	41.8	+0.3	42.0	+9.1	52.8	+1.1
Creston	21.7	−12.5	38.2	+6.0	48.3	+4.8	53.6	+0.8	68.7	+5.1	70.0	−0.5	72.0	−2.8	78.5	+5.3	62.5	−5.0	60.4	+5.1	43.8	+0.1	42.9	+8.9	55.0	+1.3
Elkins	20.7	−8.3	34.6	+3.1	44.4	+5.3	46.7	−2.0	63.8	+4.7	63.9	−2.7	66.6	−3.9	72.2	+3.8	56.6	−5.3	55.2	+3.8	40.6	+1.0	40.2	+7.7	50.5	+0.6
Fairmont	20.0	−14.2	32.9	+0.7	44.2	+2.9	49.9	−2.5	67.8	+5.1	69.8	−0.2	71.8	−2.7	77.7	+4.9	60.4	−6.9	57.5	+2.4	42.4	−0.4	40.4	+7.7	52.9	−0.2
Glenville	23.2	−10.3	38.7	+6.5	49.1	+5.3	54.2	+0.9	69.8	+6.4	71.6	+1.1	73.5	−1.5	79.2	+5.7	64.2	−3.5	61.0	+5.6	44.6	+1.1	43.4	+8.4	56.0	+2.1
Grafton	22.4[b]	−10.5	35.8	+4.5	46.2	+3.7	51.7	+0.3	68.1[c]	+5.7	69.2	−0.1	71.0	−1.8	76.8	+5.3	61.5	−5.1	58.6	+3.4	42.1	−1.9	41.2	+7.2	53.7	+0.9
Lost Creek	21.3	−12.0	36.4	+5.9	45.8	+3.4	50.2	0	66.4	+5.1	67.4	−0.3	69.5	−3.0	76.2	+5.6	60.2	−5.0	57.0	+2.6	42.7	+0.5	41.5	+8.1	52.9	+0.9
Mannington	19.6	−12.5	34.6	+3.9	45.2	+2.9	50.5	−0.8	66.0	+4.6	66.9	−1.2	69.4	−3.2	74.8	+3.9	59.0	−6.4	57.6	+2.1	42.5	+1.4	40.9	+8.4	52.2	+0.3
Morgantown	20.4[a]	−12.1	35.8	+4.6	46.8	+4.8	52.2[c]	+0.9	68.4[i]	+5.7	69.2[b]	+0.3	70.9	−2.7	76.2	+4.9	61.8[a]	−5.7	.....	.....	.....	.....	.....	.....	.....	.....
Moundsville	18.8[c]	−14.3	.....	.....	42.4[a]	.....	47.5[a]	−4.5	67.2[k]	+4.0	66.8	−2.9	70.8[a]	−3.7	77.6[a]	+4.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Cumberland	16.0	−12.8	31.0	+3.8	42.4[b]	+2.6	48.8	−0.6	65.8	+4.9	66.5[a]	−1.4	69.8	−3.2	76.4[d]	+5.6	58.2	−7.3	55.9	+1.7	43.0	+1.7	38.6[a]	+7.6	51.0	+0.2
New Martinsville	19.2	−14.0	31.8	+2.8	46.6	+3.4	52.3	−0.9	68.2	+4.4	71.2	−0.2	73.0	−2.6	79.7	+5.6	62.2	−6.5	60.0	+3.2	45.8	+1.2	42.2	+7.3	54.6	+0.3
Parkersburg	20.3	−11.0	36.8	+3.0	47.8	+5.5	51.6	−1.3	69.0	+5.7	70.0	−1.4	72.6	−3.0	78.6	+5.4	61.0	−5.2	59.2	+4.6	44.2	+1.1	43.3	+8.1	54.5	+1.0
Parsons	21.3	−10.7	33.6	+4.3	44.8	+5.3	48.4	−0.4	64.0	+4.6	65.4	−0.9	67.6	−2.8	73.0	+2.9	57.6	−5.7	55.8	+3.2	41.2	0	39.0	+7.7	51.0	+0.6
Philippi	.....	.....	.....	.....	.....	.....	.....	.....	67.8	+5.9	67.4	−1.0	66.1	−6.8	73.7	+2.0	56.6	−9.0	.....	.....	.....	.....	.....	.....	.....	.....
Pickens	22.2[a]	−9.6	35.0[a]	+3.4	46.2[a]	+5.2	48.0[a]	−0.5	63.8[c]	+4.8	63.3[b]	−1.9	65.0	−3.8	.....	.....	56.2[a]	−5.6	55.8	+3.6	39.6	−1.0	39.4[a]	+7.1	.....	.....
Smithfield	17.8	−14.5	32.0	+1.3	43.8	+2.2	49.2	−2.5	65.3	+3.8	66.4	−1.6	69.8	−2.6	75.4	+4.2	59.2	−6.2	55.0	+1.5	41.0	0	39.2	+7.4	51.2	−0.6
Terra Alta	15.2	−13.2	31.2	+3.6	42.4[a]	+3.6	44.6	−2.9	62.0	+2.4	61.4	−4.8	64.2	−5.4	69.6	+1.6	55.6	−7.5	.....	.....	41.0[f]	−1.1	37.0[e]	+6.5	.....	.....
Wellsburg	.....	.....	.....	.....	.....	.....	49.2[e]	+0.3	65.9	+5.0	67.6	+0.3	70.8	−1.1	75.6	+5.6	58.8	−5.9	55.9	+2.4	41.8	+0.6	37.9	+9.0	.....	.....
Weston	23.2	−10.8	37.0[c]	+5.6	48.3	+4.8	52.2	−0.4	67.6	+4.2	68.6	−2.4	71.0	−3.7	76.6	+3.3	61.2	−6.2	59.8	+4.9	44.0	+0.7	43.5	+8.4	54.4	+0.7
Wheeling	17.2	−16.0	32.0	+1.2	44.6	+2.9	49.8	−3.1	68.1	+4.9	70.2	−0.3	72.5	−1.7	78.3	+5.1	60.7	−6.0	57.6	+2.7	42.8	+0.4	39.2	+5.6	52.8	−0.4
SOUTHERN DIVISION																										
Bancroft	21.8	−13.7	36.2	+3.0	48.0	+3.8	53.3	−0.3	66.4[c]	+2.1	69.0[a]	−2.1	70.6	−5.0	76.6	+2.8	60.6	−8.7	58.3	+0.9	43.4	−1.6	39.4	+3.9	53.6	−1.2
Beckley	24.6	−9.2	39.8	+6.9	50.4	+7.4	50.3	−0.7	65.6	+5.6	65.8	−1.4	67.9	−3.6	72.8	+3.2	61.3	−2.3	57.4	+3.0	.....	.....	.....	.....	.....	.....
Bluefield	24.4	−10.4	41.0	+7.4	50.2	+6.6	50.8	−2.8	60.4[c]	−2.1	67.4	−1.5	66.4	−5.5	71.1	−0.2	60.0	−6.2	60.0	+4.4	44.2	−0.5	42.2	+7.2	53.2	−0.3
Breading	.....	.....	.....	.....	.....	.....	67.9	.....	69.6[a]	.....	70.4[h]	.....	78.1	.....	63.2	.....	61.4[c]	.....	46.9[i]	.....	43.6[a]	.....	.....	.....	.....	.....
Charleston	26.4	−13.1	39.2	+0.8	51.9	+3.2	54.5	−2.4	70.0	+3.7	72.5	−0.1	74.6	−1.9	79.8	+4.3	65.8	−4.4	62.0	+3.6	49.0	+0.9	47.4[a]	+7.4	57.8	+0.2
Cuba	21.0	−13.0	37.9	+5.7	48.1	+4.3	53.0	+0.3	68.7	+5.5	68.5	−0.5	71.0	−2.5	76.2	+4.2	61.4	−5.4	60.0	+4.8	45.0	+1.4	42.8	+8.9	54.5	+1.1
Elkhorn	25.3	−12.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Evans	23.0	.....	38.5	.....	47.6	.....	54.2	.....	68.5	.....	70.0	.....	72.0	.....	78.7	.....	61.2	.....	60.4[i]	.....	44.2	.....	45.2	.....	55.3	.....
Green Sulphur Springs	25.1[k]	8.2	35.8	+3.6	47.2	+4.1	49.4	−1.4	63.8[a]	+2.0	67.6[f]	−0.8	.....	.....	.....	.....	.....	.....	56.3	+1.7	44.4[a]	+1.8	.....	.....	.....	.....
Hinton	21.0	−14.0	35.5	+1.4	47.4	+3.3	49.6	−3.7	67.0	+2.7	68.6	−1.9	70.8	−3.7	75.8	+1.8	61.2	−6.9	58.0	+1.5	42.6	−1.8	40.0	+4.4	53.1	−1.4
Holcomb	19.4	.....	33.3	.....	.....	.....	49.4	.....	63.6	.....	65.0	.....	65.6	.....	72.1	.....	57.6	.....	55.9	.....	40.8	.....	40.0	.....	.....	.....
Huntington	20.5	−13.1	37.4	+5.2	48.2	+3.8	53.6	−0.4	69.8	+4.7	72.6	+0.1	73.6	−3.1	79.5	+4.9	60.8	−7.7	58.6	+2.5	43.5	−0.2	43.2	+8.8	55.1	+0.5
Lewisburg	19.6	−13.2	34.6	+2.8	46.8	+4.6	48.7	−1.6	64.4	+3.5	65.8	−1.6	67.4	−3.9	72.2	+2.2	58.8	−5.7	56.6	+3.3	41.4	0	38.8	+6.3	51.3	−0.3
Marlinton	16.0	−13.2	28.3	−0.4	40.3	+1.7	44.3	−3.1	60.8	+2.0	61.8	−3.5	64.0	−4.8	68.6	+0.9	54.3	−7.9	50.0	−0.4	35.9	−2.4	33.8	+4.0	46.6	−2.3
Point Pleasant	20.2	−13.8	38.2	+5.0	48.6	+3.5	.....	.....	69.6	+4.1	.....	.....	.....	.....	.....	.....	63.3	−6.2	61.4	+4.1	45.5	+0.3	46.7[f]	.....	.....	.....
Powellton	.....	.....	.....	.....	.....	.....	.....	.....	73.2	+2.5	73.0	−1.3	.....	.....	.....	.....	.....	.....	61.5	+6.2	45.2	+0.5	44.2	+8.1	.....	.....
Robertsburg	19.6	−14.9	35.4	+2.8	47.0	+2.4	52.0	−1.1	67.7	+3.4	70.0[e]	−1.3	71.9	−3.8	78.3	+3.9	61.6	−6.9	58.9	+1.7	44.0	+0.6	41.4	+7.0	54.0	−0.5
Ryan	22.2	−12.0	37.4	+4.3	47.1	+3.4	51.6	−0.9	67.8	+5.2	71.2	+2.4	73.4	+0.6	77.8	+5.8	.....	.....	.....	.....	42.0	−1.4	41.6	+7.5	.....	.....
Spencer	22.4[a]	−12.4	36.6[a]	+3.7	47.6[a]	+5.2	51.5	−1.2	68.0	+5.7	69.1	0	71.4	−2.4	78.0	+5.7	60.4	−5.8	59.4	+4.6	42.8	−0.5	42.4	+8.2	54.1	+0.9
Sutton	22.8	−11.9	37.0	+2.9	48.2	+2.8	51.0	−2.2	67.3	+2.0	70.3	−2.6	71.0	−5.8	77.6	+2.0	62.0	−8.7	58.8	+1.3	41.2	−0.1	43.0	+9.3	54.2	−0.9
Union	20.4[a]	−13.1	35.0[b]	+2.1	47.2[a]	+4.5	49.2[d]	−1.5	67.0[b]	+6.1	67.8[b]	+1.2	70.0[e]	−0.9	.....	.....	.....	.....	56.6	+3.2	41.4	+1.1	39.6	+7.8	.....	.....
White Sulphur Springs	21.6	.....	36.9	.....	47.3	.....	50.2	.....	64.8	.....	.....	.....	69.0	.....	73.6	.....	61.1	.....	57.6	.....	.....	.....	.....	.....	.....	.....
Williamson	24.6	−12.1	39.0	+3.1	49.8	+3.0	53.6	−1.8	68.4	+2.4	69.6	−2.6	71.4	−4.6	76.9	+1.8	64.2	−5.6	61.0	+2.6	45.6	+0.3	44.1	+6.9	55.7	−0.6
Wilsondale	23.2[b]	.....	42.1[a]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Reference letters indicate number of days missing; [a] one day, [b] two days, etc.

Monthly and Annual Precipitation for the Year 1918, with Departures from Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
PANHANDLE DIVISION.																										
Bayard	2.00	−3.34	4.34	+0.86	5.57	+1.13	4.55	+0.55	4.10	−0.24	3.71	−1.36	4.73	−0.18												
Brandywine	3.94		1.07		3.77		5.18		3.69		5.44		4.20		3.66		3.87		2.40		1.17		2.70		41.09	
Burlington	2.95	+0.31	1.95	−0.49	1.55	−1.01	6.50	+3.87	2.91	−0.89	3.55	−0.52	2.23	−1.38	6.03	+2.50	3.53	+0.68	2.27	+0.07	0.98	−0.76	4.40	+1.74	38.85	+4.12
Harpers Ferry	3.46	+0.60	0.70	−1.89	2.41	−0.73	6.52	+3.62	2.34	−1.38	2.20	−1.71	2.96	−0.37	3.58	−0.25	4.06	+1.22	1.59	−1.25	1.90	−0.34	2.93	+0.22	34.59	+2.26
Martinsburg	4.96	−2.41	1.15	−1.32	2.31	−0.95	8.62	+5.68	2.72	−1.03	3.03	−1.29	2.41	−1.54	4.83	+1.03	3.28	+0.47	3.88	+1.29	1.10	−1.03	4.88	+2.18	43.17	+5.93
Moorefield	3.95	+1.37	0.87	−1.53	2.75	+0.04	7.26	+4.45	3.45	−0.17	3.28	−1.13	3.62	+0.15	2.20	−0.95	2.47	−0.17	2.26	+0.06	1.35	−0.27	3.71	+1.42	37.17	+3.27
Piedmont	4.82		2.71		2.71		6.75		4.60		3.15		2.92		3.51		2.68		2.80		0.93		4.82		42.40	
Romney	3.30	+0.55	1.79	−0.49	2.54	−0.60	9.14	+6.46	2.77	−0.89	4.19	+0.33	3.48	−0.04	3.51	−0.37	3.88	+1.39	2.44	+0.05	1.17	−0.79	4.71	+2.21	42.92	+7.81
Upper Tract	4.40	+1.83	1.65	−0.10	3.40	+0.83	6.30	+3.96	2.43	−0.87	4.20	−0.25	3.45	−0.25	2.40	−1.62	2.93	+0.55	1.70	−0.58	1.30	−0.34	2.70	+0.42	36.86	+3.58
Wardensville			0.45		2.70		7.30		3.53		2.20		3.28		4.75		2.64		2.65		0.64		3.40			
NORTHERN DIVISION.																										
Bens Run	3.84	−0.73	3.80	−0.77	3.96	−0.36	5.11	+1.11	6.97	+2.52	2.67	−2.09	1.69	−2.92	3.09	−0.68	2.68	+0.35	3.15	+0.19	2.16	−0.41	3.94	+0.02	43.06	−3.77
Brandonville			4.77		3.42		5.25		4.82		4.98		6.75		4.90		2.75				2.24		5.29			
Buckhannon	6.20	+1.66	5.40	+1.54	6.51	+1.93	5.22	+1.01	7.78	+3.40	5.58	+0.65	2.55	−2.75	6.05	+2.09	2.55	−0.59	3.77	+0.52	2.15	−1.22	4.92	+0.83	58.68	+9.07
Cortland	3.60		6.40		5.14		5.26		3.82		4.19		2.96		2.63		4.41		3.76		1.50		5.31		48.98	
Creston	3.01	−0.77	4.02	+1.13	4.86	+0.81	4.75	+1.35	3.16	−0.40	2.86	−1.52	3.34	+0.04	2.67	−0.47	2.21	−0.23	3.18	+0.49	2.49	+0.04	3.99	+0.72	41.04	+1.19
Davis	5.55		3.99		2.79		4.52		2.77		3.25		1.19		5.16		3.93		3.04		2.62		8.09		46.86	
Elizabeth	4.32		2.69		4.88		4.41		4.63		1.70		2.24		6.04		3.08		4.16		1.81		3.11		43.07	
Elkins	5.11	+1.77	3.61	+0.44	5.61	+1.54	4.66	−1.37	5.87	+1.89	5.32	+0.28	1.68	−2.96	5.43	+1.78	3.06	+0.19	3.40	+0.98	1.60	−1.26	5.93	+2.51	51.28	+5.79
Fairmont	3.69	−0.29	4.12	+1.10	3.03	−0.32	4.04	+0.55	5.22	+1.22	1.91	−2.68	3.59	−1.24	3.41	−0.06	2.15	−0.45	4.04	+1.45	2.28	−0.42	3.66	+0.20	41.14	−0.94
Glenville	3.80	−0.53	3.35	−0.49	5.56	+1.28	4.79	+1.02	5.79	+1.84	3.26	−1.09	3.58	−1.89	4.25	+0.33	3.49	+0.14	3.60	+0.70	2.18	−0.81	3.86	+0.12	47.51	+0.62
Grafton	4.91	+0.84	3.73	+0.38	3.39	−1.00	4.34	+0.63	5.11	+0.75	4.19	−0.49	6.90	+1.97	4.02	+0.02	2.64	−0.32	3.49	+0.69	2.00	−1.09	4.92	+1.29	49.34	+3.67
Lost Creek	4.24	+0.16	4.18	+1.17	5.09	+0.98	4.67	+1.27	6.50	+2.39	2.42	−1.51	4.14	−0.58	4.48	+0.37	1.93	−0.90	3.13	+0.61	2.48	+0.02	4.32	+0.79	47.58	+4.77
Mannington	3.29	−1.50	4.62	+2.00	2.85	−1.04	4.25	+0.26	7.01	+3.07	1.09	−2.93	3.63	−1.02	3.80	+0.34	2.15	−0.20	3.52	+0.85	2.54	+0.11	4.20	+0.81	42.95	+0.75
Morgantown	2.41	−1.50	1.57	−0.61	1.87	−1.92	4.03	+0.64	5.10	+1.51	2.99	−1.61	4.07	−1.08	4.86	+0.86	1.64	−1.47								
Moundsville	2.86	−0.39			1.57	−1.92	4.05	+0.94	7.99	+4.93	1.90	−1.62	2.75	−1.77	4.50	+1.62	2.83	+0.28	2.87	+0.03	1.77	+0.07	4.48	+1.43		
New Cumberland	2.80	−0.02	1.90	−0.55	1.55	−1.90	3.32	−0.13	4.02	+0.86	0.87	−3.80	1.88	−2.61	4.45	+1.21	2.62	+0.16	2.86	+0.14	1.98	+0.17	3.55	+0.99	31.80	−5.48
New Martinsville	3.78	−0.02	3.80	0	1.99	−1.79	4.25	+0.45	7.45	+3.84	2.05	−1.94	1.67	−3.16	3.33	+0.03	1.45	−1.26	3.90	+1.31	1.80	−0.81	5.27	+1.65	40.74	−1.70
Parkersburg	2.24	−0.95	2.81	−0.43	3.54	−0.28	4.47	+1.56	3.51	+0.05	3.39	−1.26	1.28	−3.38	5.14	+1.61	2.53	−0.19	3.19	+0.75	1.85	−0.98	4.23	+1.46	38.18	−2.04
Parsons	4.40	−0.10	5.28	+1.81	3.17	−1.08	4.67	+0.85	4.64	+0.74	2.86	−2.72	1.81	−3.39	3.39	−0.39	3.00	−0.32	1.99	−0.75	2.10	−0.42	4.62	+0.84	41.93	−4.93
Philippi							3.24	−0.70	5.85	+1.63	5.62	+1.12	3.06	−1.97	5.42	+1.31	2.13	−1.07					4.77	+0.83		
Pickens	9.22	+2.62	6.60	+1.48	7.07	+1.19	5.95	+0.87	10.28	+5.28	5.95	−0.18	5.24	−1.03			3.35	−0.64	5.59	+1.81	4.15	+0.34	7.71	+2.77		
Rowlesburg	5.84	+1.21	5.05	+1.67	3.86	−0.47	4.97	+0.99	5.37	+1.09	8.24	+3.33	5.30	+0.50	3.86	−0.10	4.22	+1.22	3.38	+0.50	3.33	+0.31	5.58	+1.91	59.00	+12.36
St. Marys	3.64	−1.16	3.63	+0.23	4.22	+0.49	4.76	+1.17	6.37	+2.66	2.08	−1.55	2.92	−1.04	2.59	−2.24	3.22	+0.86	4.13	+0.67	2.33	+0.27	3.56	+0.06	43.45	+0.42
Smithfield	5.04	−0.49	5.40	+1.79	2.87	−1.35	5.18	+1.36	6.41	+2.46	2.80	−1.82	2.53	−2.84	3.72	−0.52	3.21	−0.28	3.66	+0.31	2.83	+0.04	4.65	+0.59	48.30	+0.75
Terra Alta	2.60	−3.01	1.35	−2.66	3.00	−2.09	4.40	+0.51	5.63	+0.59	4.38	+3.43	4.18	−1.56	4.35	−0.51	3.25	−0.48			1.44	−2.12	8.14	+2.49		
Wellsburg									5.30	+1.84	1.76	−2.70	3.16	−1.42	4.32	+0.76	2.55	−0.30	3.36	+0.60	1.57	−0.54	3.85	+0.64		
Weston	3.35	−0.83			5.45	+1.37	4.85	+0.81	5.50	+1.25	4.70	+0.30	3.18	−1.90	4.15	+0.25	2.25	−0.76	3.65	+0.67	2.35	−0.95	4.70	+0.99		
Wheeling	3.52	+0.35	3.11	+0.54	1.59	−1.62	3.79	+0.68	4.71	+1.25	1.80	−2.09	1.52	−3.06	4.49	+1.03	2.87	+0.28	3.16	+0.74	1.33	−0.82	4.15	+1.16	36.34	−1.56
SOUTHERN DIVISION.																										
Bancroft	4.83	+0.57	2.41	−0.68	3.53	−0.55	4.66	+0.58	3.66	−0.41	4.30	−0.31	1.76	−2.59	1.83	−2.77	2.16	−0.70	3.99	+1.10	1.57	−0.95	3.23	+0.10	37.93	−6.61
Beckley			1.71	−1.46	3.37	−0.54	4.23	+0.30	2.09	−1.11	3.86	−0.48	3.69	−0.46	2.92	−0.17	2.15	−0.54	2.45	+0.06						
Bluefield	4.06	+1.01	1.84	−1.23	4.11	+0.36	4.80	+1.46	3.28	−0.45	6.05	+1.17	2.23	−2.26	2.05	−2.30	3.68	+0.96	4.61	+1.93	1.61	−0.84	3.88	+0.93	42.20	+0.74
Breeding									3.68		5.45		1.04		7.71		1.92		4.58				4.40			
Camden-on-Gauley	5.10		5.63		8.72		8.51		6.96		7.20		3.10		9.15		3.33		7.44		4.60		7.33		77.07	
Charleston	4.44	+0.65	3.77	−0.02	6.85	+2.52	6.03	+2.42	4.12	+0.21	6.44	+1.92	3.23	−0.90	4.83	+0.51	3.63	+0.68	4.88	+2.22	2.25	−0.66	3.29	0	53.76	+9.55
Clay	2.81		3.13		3.79		1.88		1.20		0.89		5.82		1.35		2.48		3.15		1.94		2.61		31.05	
Cuba	2.14	−1.63	2.64	−0.38	4.45	+0.80	4.87	+1.53	2.56	−0.84	2.03	−1.92	4.19	+0.06	3.78	+0.75	1.20	−1.20	3.51	+0.67	1.38	−0.89	4.24	+1.02	36.99	−2.03
Dam 19 O. R.	3.98		3.21		4.05		4.91		5.54		2.96		1.71		4.86		3.45		3.16		2.01		3.99		43.86	
Dam 20 O. R.	2.71		3.36		4.41		4.51		3.27		1.72		1.36		4.36		3.20		3.66		2.11		4.62		39.29	
Dam 22 O. R.	3.36		3.44		4.94		3.49		3.70		3.24		2.73		4.21		1.37		3.41		1.81		4.67		40.37	
Dam 26 O. R.	3.59		2.65		3.86		5.13		2.88		4.55		1.45		0.63		1.82		3.50		1.21		4.94		36.21	
Elkhorn	5.86	+2.69																								
Evans	3.42		3.47		4.44		4.41		2.99		4.19		1.24		3.89		4.19		4.09		1.92		4.08		42.33	
Gary	6.56		2.90		6.35		4.97		3.47		6.46		4.10		4.82		4.71		4.99		0.87		4.40		51.60	
Green Sulphur Springs			2.85	+0.18	4.44	+0.08	5.53	+2.31	4.71	+1.30	5.87	+1.87							7.53	+5.55	2.80	+0.71				
Hinton	5.75	+2.70	2.00	−1.11	4.56	+0.49	4.76	+1.56	2.82	−0.97	4.77	+0.66	5.38	+1.67	5.08	+1.42	2.92	+0.20	6.02	+3.62	1.22	−0.93	3.20	+0.37	48.48	+9.68
Holcomb	5.13		3.00		9.37		5.68		4.96		6.39		4.65		5.00		4.10		4.95		2.38		5.34		60.95	
Huntington	4.25	+0.50	2.16	−1.34	4.04	−0.38	4.96	+1.34	2.94	−1.01	4.06	−0.21	2.76	−1.61	1.98	−1.79	3.14	+0.79	2.86	+0.49	1.12	−1.58	3.56	+0.18	37.63	−4.62
Kaylord	4.88		2.40		6.07		6.32		3.31		5.44		4.19		3.26		3.22		3.27		1.89		3.55		47.80	
Lewisburg	4.89	+1.63	2.13	−0.82	5.08	+0.99	5.97	+2.82	1.96	−1.77	7.41	+3.29	4.42	+0.59	5.81	+0.31	2.87	+0.12	4.99	+2.35	1.50	−0.77	3.72	+0.94	50.75	+9.68
Logan																										
Marlinton	6.44	+2.63	2.98	−0.46	6.52	+2.23	6.50	+2.31	4.38	+0.49	10.11	+5.30	4.62	−0.47	5.60	+1.19	4.73	+1.53	4.64	+1.78	1.92	−0.82	5.18	+2.02	63.62	+17.73
Nuttallburg																										
Point Pleasant	3.97	+0.12	2.83	−0.78	3.82	−0.50	3.33	+0.05	3.00	−0.77	4.91	+0.54	2.99	−1.01	1.44	−1.82	2.70	+0.42	3.78	+1.28	1.49	−1.31	4.03	+1.04	38.29	−2.74
Powellton											4.51	−0.24	4.95	+0.50					3.10	+0.98	1.38	−1.25	3.80	+0.96		
Rainelle																										
Raleigh	5.54		3.29		3.63		4.99		3.13		4.94		3.03		5.13		2.75		4.29		1.89		4.44		47.05	
Renick	5.70		1.73		6.95		6.19		2.44		5.80		4.32		4.10		2.85		5.07		1.47		3.48		50.10	
Robertsburg	3.83	−0.11	2.76	−0.43	4.87	+0.71	3.91	+0.19	2.93	−0.63	3.86	+0.14	2.20	−1.67	2.92	−0.45	1.69	−0.71	3.01	+0.66	1.41	−0.94	3.12	−0.49	36.51	−3.73
Ryan	3.92	−0.26	2.85	−0.68	5.71	+1.31	4.81	+1.01	2.69	−0.81	5.08	+0.71	2.13	−2.67	2.48	−1.46	1.84	−1.04	3.84	+0.70	1.81	−0.68	3.99	+0.55	41.15	−3.32
Sissonville	2.99		2.25		3.69		4.34		4.99										4.29		1.57		3.43			
Spencer	3.02	−1.27	3.65	−0.52	7.40	+3.59	4.57	+1.21	2.05	−1.53	6.50	+1.99	1.41	−3.05	3.08	−0.33	2.76	−0.42	3.72	+0.80	2.33	−0.08	3.35	+0.15	43.84	+0.54
Sutton	4.79	−1.70	4.20	+0.74	7.78	+4.07	6.77	+2.48	6.07	+1.88	4.65	−1.14	5.26	+0.38	4.23	+0.47	2.40	−0.93	3.63	+0.50	3.02	+0.32	5.91	+2.18	58.71	+9.25
Union	3.90	+0.31	2.25	−0.49	3.65	−0.18	4.40	+0.57	1.85	−0.77	7.28	+3.18	6.00	+1.47					4.54	+1.83	1.76	−0.26	3.86	+1.43		
White Sulphur Springs	3.60		2.57		5.40		6.60		3.10				4.80		2.65		2.40		4.65							
Williamson	5.75	+1.67	2.38	−0.93	4.93	+0.78	4.16	+0.24	3.49	−0.32	3.20	−1.64	2.50	−2.10	1.61	−2.37	2.65	−0.30	3.69	+1.16	1.24	−1.43	3.41	−0.52	39.01	−5.76
Winsondale	3.35																									

Monthly Maximum Temperatures for the Year 1918, with Dates.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date	Minimum.	Date.	Minimum.	Date.	Minimum	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
PANHANDLE DIVISION.																								
Bayard	40	15†	65	28	68	21	67	17	82	12†	85	2	84	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brandywine	43	24†	78	28	76	14†	77	17†	89	28†	92	1	87	29	101	6	82	4†	83	5†	74	9	68	8
Burlington	43	25	65	28	77	22	77	29	90	27	91	1	92	27	105	5	88	4	82	15	68	8	67	8
Martinsburg	42	25	64	24	77	19†	79	29	97	27	95	1	96	21†	107	6	86	5	84	17	67	17	68	8
Moorefield	43	25†	72	28	79	19†	82[a]	29	95[b]	31	98	1	94[b]	23	109	6	91[f]	5	86	6†	73	8	69	8
Piedmont	40	15	62	11†	75	19†	77	29	91	27†	90	1†	93	23	104	6	85	4	78	5	64	8	58	8
Romney	41[i]	31	69	28	79[a]	31	82	29	96	27†	97	1	94[h]	21†	109[a]	6	89[f]	3†	89	17	70[e]	16	69	8
Upper Tract	40	15†	79	28	79[a]	1	77	28	90	30†	92[c]	1	89[a]	23	101[a]	6	84	5	86	17	74[b]	8	67[a]	8
Wardensville	.....	.....	70	28	76[b]	19†	78[b]	29	91[b]	26†	91	2	93	23	105	6	87	6	84[a]	18	76[c]	8	67[b]	8
NORTHERN DIVISION.																								
Bens Run	45	6†	72	28	79	20	78	2	91	31	91	1†	95	27	105	6	89	1	83	5	71	7	66	13
Buckhannon	51	6	72	28	74	20	76	28	89	29†	90	1	90	28	99	7	85	4	79	9	75	17	67	10
Creston	47	6	74	28	76	20	83	27	92	31	92	1	95	27	104	6	87	4	87	6	71	17	66	10
Elkins	50	26	74	28	75	20	71	28	86	29	86	1	87	21	99	6	84	4	79	17	74	8	67	14
Fairmont	49	6†	73	28	78	20	80	27	92	28†	93	1	98	27	108	7	90	4	83	2	77	17	66	19
Glenville	55	12	77	28	79	20	80	2†	95	31	95	1†	97	22†	107	6	92	4	87	2	79	17	68	9†
Grafton	51[b]	12	75	28	79	20	78	28	92[c]	29	92	1†	94	21†	104	6	90	4	84	2	76	17	62	13
Lost Creek	49	6†	72	28	76	20	76	28	90	29†	90	2†	93	21†	102	6†	89	4	82	17	78	17	68	14
Mannington	49	12	72	28	77	20	75	28	86	26†	88	1	91	21†	101	6	83	4	82	17	72	17	62	13
Morgantown	44	6	72	28	77	20	76[c]	28†	89	29	90	29	92	24†	104	7	88	4†	.....	.....	.....	.....	.....	.....
Moundsville	44[a]	6†	.....	.....	82[a]	20	77[a]	2	88[b]	29†	88	17†	97[a]	20	107[g]	5	.....	.....	.....	.....	.....	.....	.....	.....
New Cumberland	38	28	65	14	74[b]	20	78	2	90	27	90[a]	5	95	21	109[d]	6	83	2	80	2	72	7	64[a]	8
New Martinsville	46	6	70	28	80	20	78	2†	90	26†	92	17	98	28	109	6	88	4	82	5	72	7	65	13
Parkersburg	49	6	73	28	77	20	77	2	92	31	92	1	94	5	106	6	86	4	83	5	69	28	67	13
Parsons	50	6	75	28	82	20	75	26†	92	26	91	1	94	28	101	7	85	4	82	17	76	16	68	14
Phillippi	.....	.....	.....	.....	.....	.....	.....	.....	91	28	90	2†	91	27	.....	.....	89	3†	.....	.....	.....	.....	.....	.....
Pickens	48[a]	5	80[a]	28	77[a]	31	80[a]	27	89[c]	6	86[b]	1	87	24	.....	.....	81[a]	2	82	17	73	8	65[a]	14
Smithfield	47	6†	72	28	80	20	76	1†	92	30	91	1	94	27†	106	6	88	14	83	5	70	7†	65	13
Terra Alta	37	28	63	28	68[a]	20	67	29	82	12†	82	2	85	22	94	7	77	2	.....	.....	70	8†	63	14
Wellsburg	.....	.....	.....	.....	.....	.....	74[d]	6†	90	27	91	29	97	21	106	6	84	2	79	2†	66	7†	66	14
Weston	53	6	67[c]	14	77	20	76	28	88	26†	90	1	92	21†	102	7	87	4	82	5	77	17	68	8†
Wheeling	40	6†	69	28	85	20	82	2	95	26†	97	1	101	28	110	6	89	2	85	2	73	7	66	8
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SOUTHERN DIVISION.																								
Bancroft	42	21†	75	14	82	5	85	2	87[e]	5†	91[a]	17	92	5	102	6	85	2†	85	5	72	28	62	8
Beckley	53	27	74	9	74	22	82	17	89	11	88	2	87	20	93	5†	84	6†	85	2†	.....	.....	.....	.....
Bluefield	46	26	74	28	72	6	78	24	85	28	96	21	90	1	96	5†	83	1	83	17	73	8	63	14
Breading	.....	.....	.....	.....	.....	.....	.....	.....	95	31	93[a]	1	93[h]	28	103	6	89	4	86[c]	6	77[i]	8	70[a]	13
Charleston	43	1†	79	28	79	22	80	28	96	31	97	17	97	23	108	6	93	4	88	6	77	17	74	15
Cuba	50	6	76	28	78	20	80	2	95	28†	98	1	93	3	103	6	89	4	86	5	73	6	67	13
Elkhorn	47	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Evans	48	6	72	28	74	22	76	3†	90	31	90	1†	91	27	102	6	85	4	83[j]	5	68	28	66	13
Green Sulphur Springs	45[k]	25	81	28	77	19	75	2	91[a]	29†	92	1	.....	.....	.....	.....	.....	.....	74	2†	68	3	.....	.....
Hinton	45	25	77	28	74	6	75	19†	92	29	94	1	92	27	99	6†	86	4	81	5†	73	17	61	8[l]
Holcomb	50	27	77	28	.....	.....	78	2	90	29	89	2†	88	23†	101	7	87	4	84	17	76	8	65	10†
Huntington	45	6†	74	28	77	22	81	2	95	31	96	1	95	28	105	6	87	4	82	5	68	28	66	12†
Lewisburg	42	25†	76	28	73	19	75	29	88	29	87	1†	86	25	96	6†	85	4	81	17	70	17	61	8†
Marlinton	42	27	68	28	66	14†	66	2†	84	31	84	1	84	23	95	5	76	4	76	5	66	9	56	8
Point Pleasant	49	6	75	14†	79	22	81	2	95	31	96	1	95	27	106	6	91	4	87	5†	72	28	68[f]	13
Powellton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95	1†	93	5†	.....	.....	.....	.....	82[a]	2†	79	17	55	8†
Robertsburg	51	6	76	28	78	20	81	2	95	31	94[a]	5	97	28	106	6	92	4	87	5	72	3	66	10
Ryan	49	6	75	28	78	6†	82	2	93	29†	99	17	96	23†	100	6	88	4†	88	6	75	15†	68	10
Spencer	47[a]	28	69[a]	14†	77[a]	20†	79	2	92	27†	93	1	92	25†	104	6	89	4	85	2	72	18	68	10
Sutton	49	6†	78	28	78	1	73	2†	93	29†	95	21†	92	4†	100	7†	88	4†	87	7†	66	3†	68	9†
Union	48[a]	26	65[b]	25	76[a]	22	78[d]	3	93[h]	28	93[b]	1	92[d]	18	.....	.....	.....	.....	81	2†	72	9	68	11
White Sulphur Springs	45	25†	78	28	75	14†	78	29	90	29†	.....	.....	89	23	6	5†	88	3	85	5	.....	.....	.....	.....
Williamson	51	28	79	28	76	19	79	2†	90	26†	91	1	90	23†	9	16	89	4	84	2†	78	17	70	13
Wilsondale	55[b]	6	79[a]	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

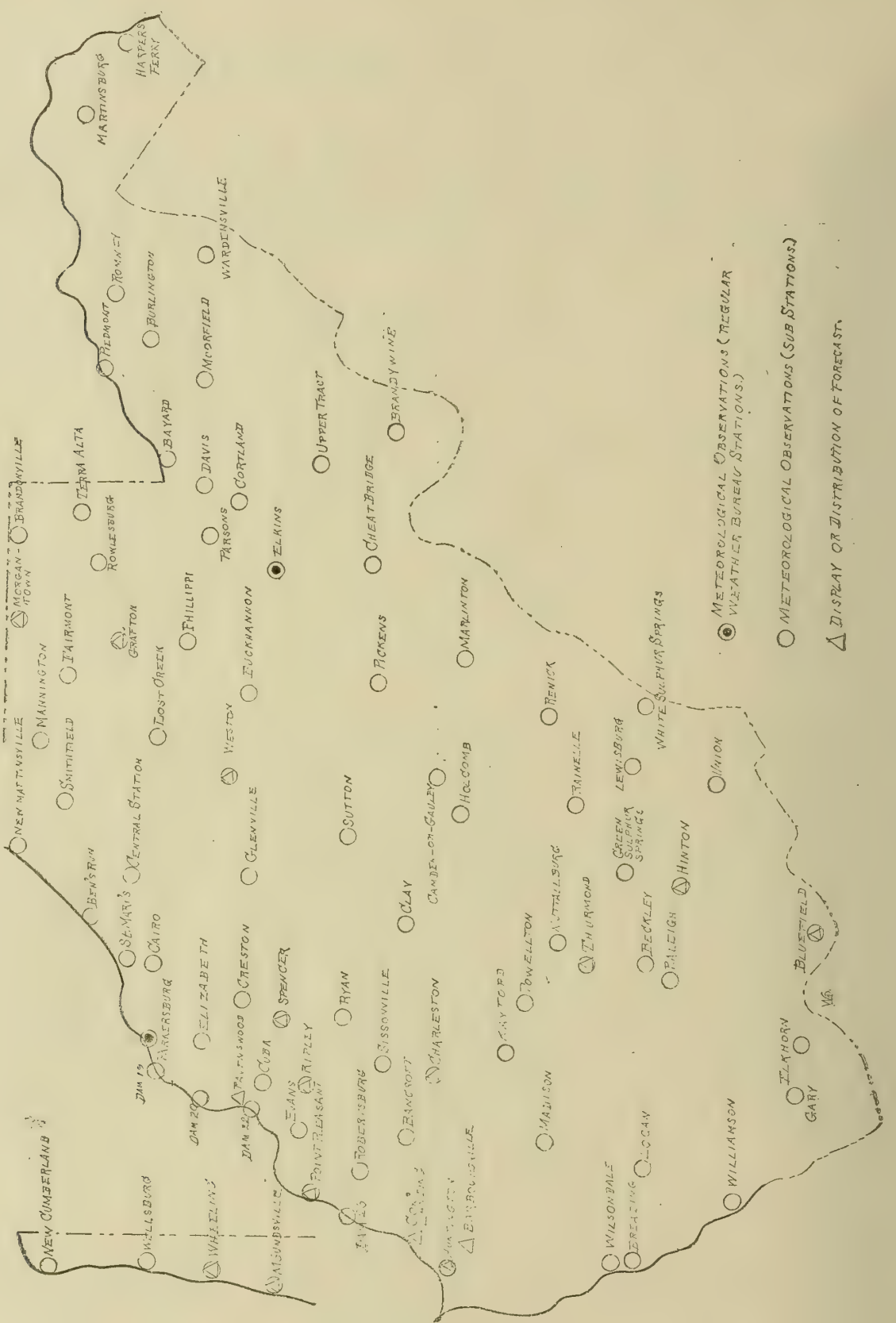
Reference letters indicate number of days missing; [a] one day, [b] two days, etc.
† Also other dates.

Monthly Minimum Temperatures for the Year 1918, with Dates.

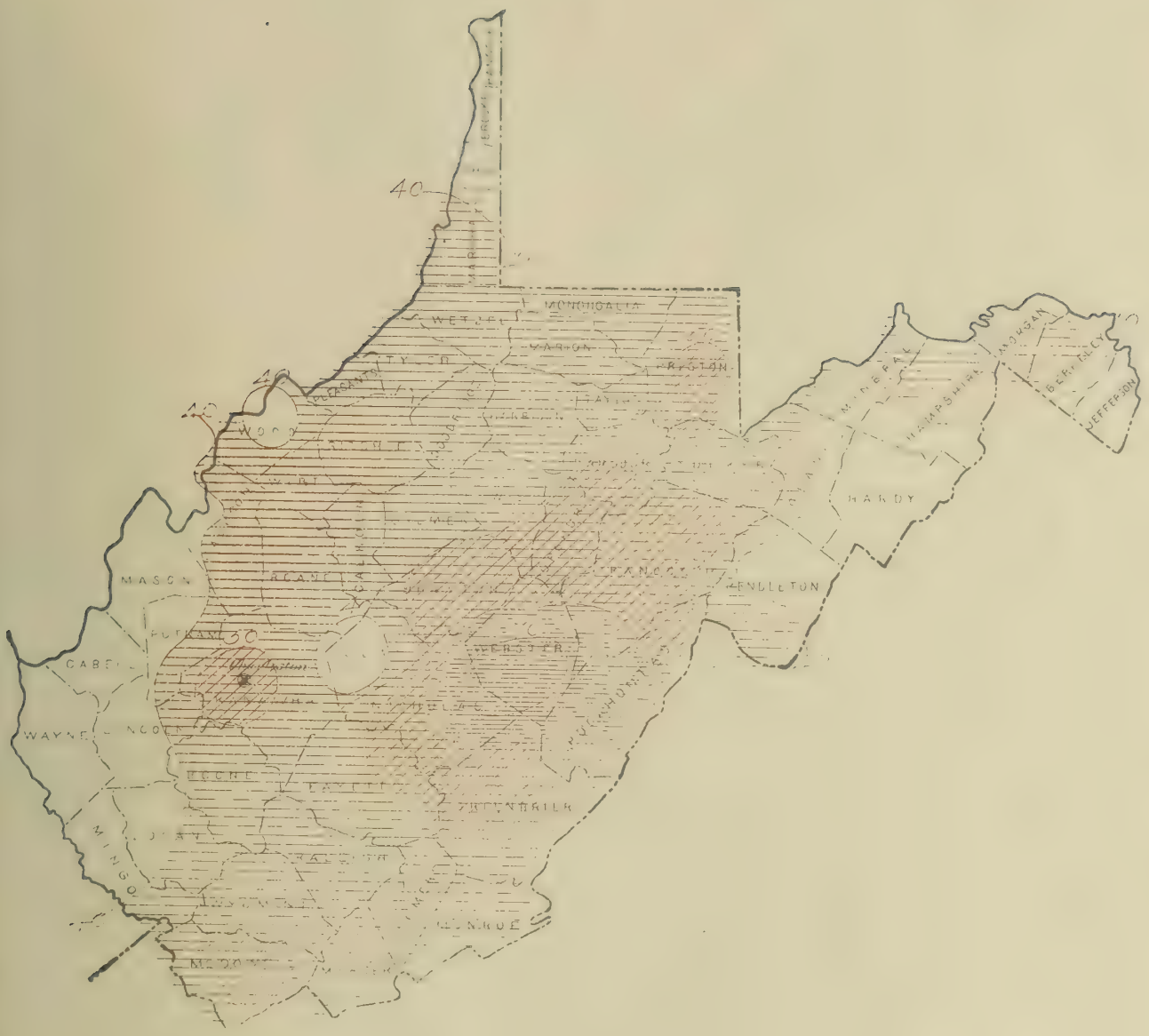
Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date	Minimum.	Date.	Minimum.	Date.	Minimum	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
PANHANDLE DIVISION																								
Bayard	−12	3	−14	5	9	11	18	5	31	2	38	24	42	15										
Brandywine	−20	21	−11	5	14	11	22	6	26	2	35	24	41	9	43	21	28	27	24	22	14	14†	9	30
Burlington	−21	21	− 5	2†	15	11	23	5†	31	2	35	24	44	3	45	20	32	28	26	22	17	12†	15	30
Martinsburg	− 4	21	− 3	5†	19	11†	29	6	40	2	45	24	50	10	50	1†	39	23†	32	22†	22	24	20	30
Moorefield	−24	15	− 8	2	18	11	22[a]	9	30[c]	2	38	24	45[b]	9	46	21	32[f]	22	27	22†	16	24	13	30
Piedmont	−11	21	− 6	5	17	11	26	5†	33	2	38	24	44	9	48	20	33	23	29	22	21	12†	18	28†
Romney	−15[i]	21	− 6	5	15[a]	11	23	6	35	2	32	24	45[b]	9	46[a]	21	33[f]	23	26	22	17[e]	24	14	30
Upper Tract	−13	3	− 5	5	16[a]	11	23	4	29	1†	38[c]	24	41[a]	9	47[a]	20†	29	22	25	22†	17[b]	12	11[a]	30
Wardensville			− 5	5	10[b]	11	22[b]	6	34[b]	2	35	24	43	3	50	21	29	28	25	23	15[b]	24	13[a]	30
NORTHERN DIVISION																								
Bens Run	−15	21	2	2	19	11	26	5	33	2	45	23	46	9	53	1	36	27	34	15	23	26	21	30
Buckhannon	−15	4	− 3	5	17	11	25	5†	29	2	40	24	45	9	47	21	31	27	29	15	19	26	13	30
Creston	−18	3	− 3	5	18	11	26	5	32	2	42	23	45	9	53	20	32	27	32	15†	19	26	15	30
Elkins	−15	21	− 7	5	14	11	21	5	27	2	38	24	41	9	45	21	29	27	27	22	19	12	10	30
Fairmont	−12	4	− 7	5	17	11	24	5	30	2	40	24	43	9	50	20	31	27	31	15†	21	26†	20	30
Glenville	−20	3†	− 4	5	11	11	23	5	29	2	42	23	45	9	49	21	31	27	30	22	15	26	12	30
Grafton	−14[b]	4	− 6	5	15	11	24	5	29[c]	2	39	24	43	9	47	20	31	27	28	22	18	27	18	2†
Lost Creek	−21	4	− 6	5	13	11	21	5	28	2	40	23	40	9	45	20	28	28	26	15	16	26	11	30
Mannington	−20	3	− 9	5	15	11	23	5	28	2	35	24	39	9	45	20	29	27	27	22	18	26†	17	30
Morgantown	− 9[a]	4	− 8	5	13	11	25[c]	9	33[j]	2	40[h]	24	46	9	52	1†	35[a]	22†						
Moundsville	−17	21			16	11	24	5	30[c]	2	40	24	43	9	50[f]	19	32	21†						
New Cumberland	−18	20†	−16	5	13[b]	16	20	5	29	2	38[a]	24	43	8†	47[i]	1	32	23	26	22	18	12†	19[a]	2†
New Martinsville	−18	21	−10	5	17	11	25	5	30	2	41	24	44	9	51	1	34	22	32	15†	21	26†	21	30
Parkersburg	−10	21	− 6	5	21	11	28	10	34	2	45	23	48	9	55	1	35	22	34	15	22	26	23	30
Parsons	−14	3	− 7	5	9	11	19	5	25	2	37	24	43	2†	41	20	29	27	25	14†	15	12	9	30
Philippi									32	2	41	24	45	10			30	24						
Pickens	− 8[a]	3†	9[a]	5	14[a]	10†	21[a]	5†	27	2	35	23	39	9			26[a]	27	26	15	15	26	9[a]	30
Smithfield	−16	3†	−19	5	14	11	22	5†	28	2	37	24	42	9	47	21	31	22†	28	22	17	26	15	30
Terra Alta	−13	21	−14	5	9[a]	11	19	5	28	2	35	24	43	9	46	20†	30	23			21[f]	3	3[c]	30
Wellsburg							21[e]	6	28	2	35	24	39	9	46	1†	31	22†	27	22	17	27	22	7†
Weston	−14	4	4[c]	5†	18	11	26	5†	31	2	42	23†	45	9	48	20	31	27	30	15	19	26	22	30
Wheeling	−14	21†	−10	5†	16	11	25	5†	31	2†	41	24	43	9	50	1†	34	22†	32	15†	21	27†	22	30
SOUTHERN DIVISION																								
Bancroft	−11	3	− 1	5	20	11	26	5†	32	2	44	23	49	9	54	20†	34	27	30	22	20	26	18	30
Beckley	−13	4	0	4	19	2	24	10	31	1	40	23†	45	2†	46	21†	31	22	29	15				
Bluefield	− 4	13†	0	5	20	11	24	10	32[g]	2	34	24	38	3	45	22	30	22	32	15	23	26	14	30
Breading									31	2	44[a]	24	48[b]	3	55	20	34	28	31[c]	15	23[j]	13	15[a]	30
Charleston	− 9	4	2	5	26	27	26	11	33	2	44	23	51	9	53	21	37	27	33	22	20	27	19[a]	30
Ceba	−23	3	− 6	5	17	11	25	5	30	2	38	23	40	2	51	1	30	27	30	15	17	26	19	30
Elkhorn	− 3	4																						
Evans	−14	4	− 1	5	22	11	28	5	36	3	42	23	49	9	54	1	30	28	34[i]	22	22	26	21	30
Green Sulphur Springs	−11[k]	21	− 1	5	12	11	23	5	27[a]	2	38[f]	24							27	14	18[a]	24		
Hinton	− 6	4	2	5†	22	11	25	11	31	2	43	23†	50	3†	51	21†	36	27	35	15†	22	26	13	30
Holcomb	−12	21	− 5	5	16[r]	11	20	15	27	2	37	24	42	2†	45	21	30	27†	27	15	15	26	10	30
Huntington	− 2	4†	2	5	24	11	28	10†	35	2	47	23	52	2	59	20†	37	27	36	15	23	26	22	30†
Lewisburg	−18	21	− 5	5	19	16	22	5	29	2	41	23†	41	9	44	21	28	22	26	15	17	30	6	30
Marlinton	−27	21	−10	5	10	11	20	5	26	2	36	23	40	3†	44	21†	28	22†	20	15	14	13†	0	30
Point Pleasant	−14	3†	− 6	5	18	11			31	2					55	20†	33	27	33	22	20	26	20[f]	29
Powelton											42	23	47	9			34[u]	22†	34[b]	15	23	26	16	30
Robertsburg	−16	4	− 1	5†	18	11	26	5	32	2	42[a]	23	49	2†	50	20	33	27	31	22†	18	26	18	30
Ryan	−24	3	− 3	5	15	11	21	5	27	2	40	23	42	9	50	20†					14	26	16	30
Spencer	−24	3†	− 2	5	21	11†	25	5	31	2	40	16	45	9	53	20†	24	23	30	15	18	26†	15	30
Sutton	−14	4	− 2	23	17	11	22	6	30	2	42	23	47	3†	50	21	34	23†	31	15†	12	26	21	29†
Union	−16	4	−12[b]	5	18	11	22[c]	14	27[g]	1	41[h]	23	42[c]	8			28[g]	22	25	15	17	13†	8	30
White Sulphur Springs	−19	21	− 3	5	17	16	21	5	26	2			42	3†	45	20†	31	24†	25	15				
Williamson	0	4	6	5†	27	16	27	10†	35	2†	44	19	54	3†	56	29	39	27	37	15	25	25	22	30†
Wilsondale	12[b]	3†	3[a]	5																				

†Also other dates.

CHART SHOWING LOCATION OF OBSERVATION AND FORECAST DISPLAY STATIONS



TOTAL ANNUAL PRECIPITATION 1912



COOPERATIVE STATIONS AND OBSERVERS

Station.	Observer.
Bancroft	R. E. Dent
Bayard	G. C. Dixon
Beckley	John A. Ewart
Bens Run	J. D. Riggs
Bluefield	Norfolk & Western Railway Co.
Brandonville	W. H. Miller
Brandywine	Elmer Keister
Breading	Emory R. Noel
Buckhannon	H. A. Darnall
Burlington	J. W. Vandiver
Cairo	J. E. Overton
Camden-on-Gauley	Miss Katie Jarvis
Central Station	D. H. Doak
Charleston	C. V. Lewis
Clay	Prof. E. H. Knabenshue
Cortland	Samuel Harmon
Cheatbridge	J. D. Wilmoth
Creston	*J. M. Reed
Cuba	Miss Faythe Howard
Dam 19, O. R	*Lockmaster
Dam 20, O. R	Lockmaster
Dam 22, O. R	*U. S. Engineer Office
Dam 26, O. R	*U. S. Engineer Office
Davis	Ross C. Male
Elizabeth	E. D. Ball
Elkhorn	J. J. Lincoln
Elkins	U. S. Weather Bureau
Evans	B. F. Sayre
Fairmont	*F. P. Hall
Gary	U. S. Coal & Coke Co.
Glenville	*Howard R. Brannon
Grafton	W. C. Byers
Green Sulphur Springs	W. H. Gwinn
Harpers Ferry	*S W. Lightner
Hinton	*J. B. Lavender
Holcomb	R. C. Ferguson
Huntington	*L. H. Hutchinson
Kayford	**Cabin Creek Con. Coal Co.
Lewisburg	George T. Argabrite
Logan	C. & O. Ry.
Lost Creek	Allen Smith
Madison	S. E. Bradley
Mannington	Jas. A. Morgan
Marlinton	S. L. Brown
Martinsburg	G. W. Van Metre
Moorefield	M. S. Henkel
Morgantown	R. W. Muldoon
Moundsville	M. Z. White
New Cumberland	M. F. Smith
New Martinsville	Wm. Ankron
Nuttallburg	Miss Donna Tully
Parkersburg	U. S. Weather Bureau
Parsons	J. W. Swisher
Philippi	Attic G. Robinson
Pickens	Dr. J. L. Cunningham
Piedmont	C. A. Suter, Jr.
Point Pleasant	W. D. Holmes
Powellton	J. F. Campbell
Rainelle	**C. N. Bobbitt
Raleigh	**Raleigh Coal & Coke Co.
Renick	**W. B. Hill
Robertsburg	E. C. Brace, Jr.
Romney	Geo. E. Arnold
Rowlesburg	*J. F. Pierce
Ryan	W. E. Ryan
Saint Marys	*William Hughes
Sissonville	J. N. Johnson
Smithfield	**G. M. Whisler
Spencer	A. M. McKown
Sutton	C. B. Eakle
Terra Alta	Chas. W. Gray
Union	Edward B. Shanklin
Upper Tract	J. M. Mallow
Wardensville	Luther F. Sutton
Wellsburg	George P. Pfister
Weston	State Hospital
Wheeling	*Miss M. B. Forsyth
White Sulphur Springs	J. M. Ayres
Williamson	*J. F. Keyser

* River Observer. **Special Rainfall Observer.

FORECAST DISTRIBUTORS AND DISPLAYMEN

[By Cards, Maps and Flags]

Station.	Distributor.
Bluefield—5	Norfolk & Western Railway Co.
Buckhannon*	Postmaster
Charleston—47	Assistant U. S. Engineer
Elkins—156	Weather Bureau Office
Grafton—60	Postmaster
Hinton—21	J. B. Lavender
Morgantown—20	Postmaster
Parkersburg—375†	Section Center
Point Pleasant—32	Miss Grace Henson
Ripley*	B. R. Parsons
Weston—34	Postmaster

Figures represent number of places supplied with forecast cards.

* Flag display station. † Forecast cards and maps.

[By Telephone Companies.]

Arbuckle & Ripley Tel. Co.
Barboursville Tel. Co.
Beverly & Marlinton Tel. Co.
Bluefield Tel. Co.
Chesapeake & Potomac Tel. Co.
Citizens United Tel. Co.
Durbin Tel. Co.
Eastern Pendleton Tel. Co.
Enterprise Tel. Co.
Greenwood Tel. Co.
Peoples Tel. Co.
Ravenswood Tel. Co.
Union Ridge & Ohio Valley Tel. Co.

1.05
NWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JANUARY, 1919

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
FEBRUARY 26, 1919

Departure of the Mean Temperature from the Normal, January, 1919.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXVII. PARKERSBURG, W. VA., JANUARY, 1919. No. 1

GENERAL SUMMARY.

January was exceptionally sunshiny and somewhat warmer than usual, with the precipitation averaging slightly below the normal and unfavorably distributed. The greater part of the rainfall was received on the 1st-2d and practically all the snow in the agricultural districts fell from the night of the 2d to the night of the 3d. Moderate floods occurred in the Monongahela, Great Kanawha, and Little Kanawha Basins, and in the Ohio River from Point Pleasant southward, as a result of the heavy precipitation at the beginning of the month. While there was no snow-cover of importance after the first week, the conditions were generally favorable for winter grains, owing to seasonally warm weather. Considerable plowing was done and the weather was excellent for outdoor work. At the close of the month winter grains and stock were generally in good condition.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.15 and 30.17 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.55 inches on the 12th, and 29.64 inches on the 1st. Elkins, 30.63 inches on the 12th, and 29.63 inches on the 1st.

TEMPERATURE.

The monthly mean for the State, 44 stations reporting, was 34.1°. The departure from the normal for 39 stations was +1.1°. The month opened warm but cool weather set in on the 2d and moderately cold weather prevailed from the 3d to the 6th. The temperature was also considerably deficient on the 9-10th. Seasonally warm weather was continuous after the 10th, except the 15th and 29th, when the thermal conditions were about normal. The highest temperatures occurred generally on the 1st, 21st, or 22d, while the lowest were on the 5th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 78 per cent; 8 p. m., 68 per cent. The January averages for the same hours for the past 30 years are 83 and 78 per cent, respectively. Elkins, 8 a. m., 84 per cent; 8 p. m., 75 per cent. The January averages for Elkins for the same hours for the past 18 years are 85 and 78 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 60 stations reporting, was 3.79 inches. The departure from the normal for 42 stations having ten or more years of record was —0.18 inch. The precipitation was heaviest over the basins of the Great Kanawha, Monongahela, and Little Kanawha Rivers, and lightest over the eastern panhandle counties. Heavy rain occurred in most sections on the 1st-2d and light to moderate snow during the night of the 2-3d and the 3d. Scattered light snow or rain fell on the 8-9th and 14-15th and light rain on the 17-18th and 23d-24th. There were scattered light snows or snow flurries on the 29th.

WIND.

The average wind velocity at Parkersburg was 5.6 miles per hour, or 1.0 mile below the January average for the past 29 years. The average at Elkins was 5.3 miles per hour, or 0.2 mile above the January average for 20 years. The highest velocity at Parkersburg was 34 miles per hour from the west on the 9th, and at Elkins 26 miles per hour from the west on the 9th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 44 per cent of the possible amount, or 16 per cent above the January average for 21 years. The average at Elkins was 53 per cent, or 24 per cent above the January average for 18 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Charleston, 21st; Elkins, 20th and 21st; Fairmont, 20th, 21st, and 22d; Glenville, 31st; Grafton, 25th, 26th, 27th, and 30th; Hinton, 9th, 16th, 20th, 22d, and 25th; Huntington, 31st; Lewisburg, 1st and 17th; Mannington, 20th; New Cumberland, 18th, 20th, 21st, 22d, and 25th; Pickens, 14th, 15th, and 18th; Robertsburg, 31st; Romney, 20th and 21st; Rowlesburg, 20th, 21st, and 23d; Smithfield, 28th; Terra Alta, 14th and 18th; Wellsburg, 5th, 18th, and 22d; Wheeling, 4th, 13th, 18th, 19th, 20th, 21st, 22d, 25th, 26th, and 28th.

Halo, solar: Elkins, 25th.

Sleet: Holcomb, 17th and 24th; Marlinton, 17th; Renick, 17th; Smithfield, 9th; Wellsburg, 8th.

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	31.7	.....	.....	3.64	....	....	....	..	..	..
1892	29.4	76	— 3	3.15	....	....	....	..	..	..
1893	22.6	71	—25	2.49	....	....	....	7	7	17
1894	36.6	70	— 8	2.41	4.23	0.83	....	12	8	11
1895	25.0	69	—21	4.48	6.53	2.37	....	6	9	16
1896	32.4	72	— 6	1.57	2.72	0.67	1.8	9	14	8
1897	28.8	69	—18	1.70	2.85	0.90	4.0	10	7	14
1898	37.1	75	— 5	5.10	8.04	2.24	5.0	6	9	16
1899	32.1	70	—21	4.05	7.01	2.05	7.5	10	7	14
1900	34.5	74	—10	2.24	3.60	0.82	1.9	9	8	14
1901	33.6	69	— 4	2.41	3.87	1.18	7.3	8	7	16
1902	30.2	64	— 1	3.65	8.52	1.45	9.8	9	7	15
1903	31.8	79	— 7	3.21	6.45	1.55	8.6	8	7	16
1904	27.5	72	—18	2.72	5.82	1.24	10.8	9	8	14
1905	26.4	70	—14	3.15	7.43	1.48	22.0	7	7	17
1906	38.2	80	— 5	3.79	8.70	1.36	5.1	11	7	13
1907	38.7	76	—15	6.41	11.54	2.35	5.6	6	7	18
1908	31.0	62	—16	2.92	8.19	0.50	12.8	12	7	12
1909	36.8	76	— 5	3.41	6.59	1.50	8.7	8	6	17
1910	32.0	67	— 5	5.68	10.10	2.52	15.4	6	6	19
1911	37.3	71	— 5	5.86	12.63	3.11	7.0	8	6	17
1912	23.5	66	—34	2.60	6.93	1.10	13.6	7	8	16
1913	40.7	74	9	6.23	10.53	1.84	5.7	9	6	16
1914	35.8	83	—11	3.18	5.65	1.55	15.6	7	6	18
1915	31.7	68	— 8	4.85	11.38	2.00	10.4	8	6	17
1916	38.8	79	—10	4.86	8.52	1.70	6.1	11	7	13
1917	33.2	77	— 9	4.66	7.67	1.72	8.3	11	6	14
1918	20.7	55	—27	4.24	9.22	2.00	21.5	8	5	18
1919	34.1	69	—16	3.79	6.66	1.60	6.9	16	4	11
Means and extremes ..	32.1	83	—34	3.74	12.63	0.50	9.2	9	7	15

Climatological Data for January, 1919.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7.0	6	19	4	8	.....	G. C. Dixon.
Brandywine	Pendleton	.....	3	34.2	.....	64	21	−10	5	41	2.62	.....	.....	7.0	6	19	4	8	s.	Elmer Keister.
Burlington	Mineral	875	25	33.2	+ 2.0	57	26†	−10	5	36	2.44	−0.14	0.75	7.0	5	18	9	4	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	30	.....	.....	.....	.....	.....	.....	.....	3.07	+0.24	0.76	3.0	5	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	27	33.6	+ 2.7	56	27†	− 3	5	33	2.45	−0.06	0.92	8.0	5	19	5	7	w.	G. W. Van Metre, C. E.
Moorefield [a]	Hardy	900	23	36.3	+ 4.0	64	30	−10	5	47	1.65	−0.93	0.70	8.0	3	27	1	2	.....	M. S. Henkel.
Piedmont	Mineral	919	6	34.6	.....	56	2	− 4	5	31	1.76	.....	0 54	3.0	6	20	4	7	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	21	36.4	+ 5.2	60	28	−10	5	42	1.77	−0.96	0.80	8.0	4	17	5	9	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	20	34.6	+ 1.8	67	21	−11	5	44	1.60	−1.01	0.60	10.0	3	21	3	7	w.	J. M. Mallow.
Wardensville	Hardy	1,200	1	34.2[b]	.....	62[b]	1†	− 8[a]	5	47[c]	2.31	.....	0.63	10.5	7	21[a]	1[a]	8[a]	sw.	Luther F. Sutton.
Averages and	extremes	.....	....	34.6	+ 3.1	67	21	−11	5	47	2.19	−0.48	0.92	7.2	5	20	4	7	w.	
Northern Division.																				
Bens Run	Pleasants	622	17	35.2	+ 2.4	65	22	1	5	35	3.14	−1.33	1.48	4.0	7	20	3	8	.....	J. D. Riggs.
Brandonville	Preston	1,809	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	22	33.8	+ 1.4	63	1	− 9	5	34	4.45	−0.03	1.20	10.0	7	17	1	13	.....	H. A. Darnall.
Cortland	Tucker	3,300	3	.....	.....	.....	.....	.....	.....	.....	4.79	.....	1.40	10.0	5	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	17	35.0[d]	+ 0.6	60	22	0[d]	5	35[d]	4.37	+0.60	1.55	4.1	9	15	0	16	sw.	J. M. Reed.
Davis	Tucker	3,093	10	.....	.....	.....	.....	.....	.....	.....	4.03	.....	1.05	15.0	11	17	4	10	.....	Ross C. Male.
Elizabeth	Wirt	646	7	.....	.....	.....	.....	.....	.....	.....	3 81	.....	1.55	.....	7	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	18	31.6	+ 2.6	61	1	−14	5	40	4.20	+0.86	1.04	13.7	12	6	10	15	w.	U. S. Weather Bureau.
Fairmont	Marion	883	13	33.8	− 0.4	63	20†	− 3	5	38	4.04	+0.11	1.37	6.0	10	18	0	13	w.	F. P. Hall.
Glenville	Gilmer	738	25	36.1	+ 2.7	69	22	− 8	5	44	4.62	+0.32	1.50	5.5	6	15	6	10	w.	Howard R. Brannon.
Grafton	Taylor	1,000	26	34.2	+ 1.3	62	1	− 9	5	35	3.34	−0.72	.....	6.0	5	16	5	10	e.	W. C. Byers.
Lost Creek	Harrison	1,026	21	34.1	+ 0.6	67	1	−13	5	41	4.14	+0.08	1.50	7.5	7	17	1	13	w.	Allen Smith.
Mannington	Marion	974	16	33.8	+ 1.7	63	22	−12	5	38	4.31	−0.45	1.88	6.0	12	17	1	13	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. W. Muldoon.
Moundsville	Marshall	642	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	3	12	sw.	M. Z. White.
New Cumberland	Hancock	987	21	32.6	+ 3.7	62	22	− 4	5	41	2.03	−0.72	0.90	4.5	8	13	12	6	sw.	M. F. Smith.
New Martinsville	Wetzel	634	25	36.6	+ 3.4	64	22	− 1	5	36	3.22	−0.53	1.59	3.5	5	17	2	12	w.	Wm. Ankrom.
Parkersburg	Wood	638	32	35.6	+ 4.3	63	22	5	4	30	2.48	−0.71	1.64	3.4	9	12	5	14	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	19	31.5	− 0.3	64	20	−14	5	46	2.13	−2.69	1.50	5.5	7	16	4	11	.....	J. W. Swisher.
Philippi	Barbour	1,149	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Attie G. Robinson.
Pickens	Randolph	2,697	16	30.4	− 0.6	60	21	−11	5	42	6.66	+0.10	2.01	28.0	11	15	5	11	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	32	.....	.....	.....	.....	.....	.....	.....	5.31	+0.93	1.65	.....	11	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	10	.....	.....	.....	.....	.....	.....	.....	3.41	−1.39	1.33	3.0	9	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	13	30.4	− 1.6	60	22	− 4	5	36	3.03	−2.40	1.30	7.8	10	22	2	7	nw.	G. M. Whisler.
Terra Alta	Preston	2,612	18	30.8	+ 2.2	58	21	−16	5	43	4.29	−1.52	1.16	16.0	13	18	4	9	w.	Charles W. Gray.
Wellsburg	Brooke	1,225	18	33.2	+ 3.4	60	1	− 5	5	36	1.71	−1.84	0.90	3.0	6	17	5	9	w.	George P. Pfister.
Weston	Lewis	1,026	23	35.6	+ 1.6	65	21	− 7	5	38	4.20	+0.02	1.10	8.0	7	8	8	15	.....	Weston State Hospital.
Wheeling	Ohio	645	32	34.2	+ 1.0	64	20†	− 2	6	42	2.01	−1.11	0.65	3.1	9	14	5	12	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	33.6	+ 1.6	69	22	−16	5	46	3.74	−0.59	2.01	7.9	8	16	4	11	w.	
Southern Division.																				
Bancroft	Putnam	574	15	.....	.....	.....	.....	0	4†	....	4.70	+0.49	1.56	5.5	8	23	0	8	ne.	R. E. Dent.
Beckley	Raleigh	2,440	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John A. Ewart.
Bluefield	Mercer	2,558	24	36.7	+ 2.0	64	2†	− 2	4†	40	.....	.....	.....	.....	.....	11	9	11	.....	Norfolk & Western Ry.
Breading	Mingo	507	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	4	.....	.....	.....	.....	.....	.....	.....	5.01	.....	1.70	11.0	6	.....	.....	.....	n.	Miss Katie Jarvis.
Charleston	Kanawha	597	16	38.8	− 0.2	65	22	1	5	50	5.35	+1.61	1.58	6.5	8	16	3	12	n.	C. V. Lewis.
Clay††	Clay	706	3	.....	.....	.....	.....	.....	.....	.....	3.19	.....	1.80	6.0	7	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	17	36.2	+ 2.1	67	22	− 3	5	39	3.02	−0.71	1.50	1.5	6	16	5	10	w,	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	3	.....	.....	.....	.....	.....	.....	.....	3.52	.....	1.57	3.0	8	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	3	.....	.....	.....	.....	.....	.....	.....	3.42	.....	1.34	3.0	7	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	4	.....	.....	.....	.....	.....	.....	.....	3.43	.....	1.48	3.0	6	.....	.....	.....	se.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	3	.....	.....	.....	.....	.....	.....	.....	4.11	.....	1.60	2.0	8	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans	Jackson	606	7	36.2	.....	60	1	4	5	29	3.61	.....	1.59	3.0	6	11	2	18	.....	B. F. Sayre.
Gary	McDowell	1,426	3	.....	.....	.....	.....	.....	.....	.....	3.80	.....	1.85	6.2	7	.....	.....	.....	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Hinton	..do	1,450	22	34.0[a]	− 1.0	60[a]	1	0	5	35[a]	4.22	+1.18	1.14	7.0	10	13	0	18	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	7	32.0	.....	62	21†	0	10	43	4.50	.....	1.08	12.8	13	15	3	13	.....	R. C. Ferguson.
Huntington	Cabell	538	25	33.0	− 0.4	60	1	6	5†	30	4.25	+0.57	3.00	5.8	9	17	3	11	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	0	.....	.....	.....	.....	.....	.....	.....	4.84	.....	1.85	7.0	5	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	3	.....	.....	.....	.....	.....	.....	.....	5.11	.....	1.78	6.6	11	.....	.....	.....	.....	CabinCreek Con.Coal Co.
Lewisburg	Greenbrier	2,200	19	31.4	− 0.3	59	21	−11	5	38	4.87	+1.59	1.38	5.0	6	13	7	11	nw.	Geo. T. Argabate.
Logan	Logan	687	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	20	26.1	− 2.8	54	21	−14	5	38	5.84	+2.08	2.30	8.5	7	9	14	8	nw.	S. L. Brown.
Point Pleasant	Mason	553	26	35.6	+ 1.4	67	21	3	5	39	4.78	+0.99	1.52	3.0	9	14	0	17	.....	W. D. Holmes.
Powellton	Fayette	933	23	34.8	− 1.8	60	1†	0	5	30	4.23	−0.41	1.26	8.5	8	17	6	8	w.	J. F. Campbell.
Raleigh	Raleigh	2,130	3	.....	.....	.....	.....	.....	.....	.....	4.05	.....	1.29	9.0	9	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	3	.....	.....	.....	.....	.....	.....	.....	6.00	.....	2.60	7.5	5	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg [a]	Putnam	574	19	34.5	0	67	21	3	5	39	4.22	+0.34	1.52	3.0	8	10	1	20	.....	E. C. Brace, Jr.
Ryan	Roane	700	16	34.0	− 0.4	64	22	− 7	5	39	4.58	+0.44	1.76	7.0	12	16	3	12	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	15	35.2	+ 0.9	65	21†	— 4	5	39	3.99	−0.30	1.54	4.0	7	16	2	13	.....	A. M. McKown.
Sutton	Braxton	839	13	35.0	− 2.6	66	23†	− 8	5	45	4.52	−0.44	1.45	12.0	9	21	4	6	.....	C. B. Eakle.
Union	Monroe	2,250	15	33.4	+ 0.1	62	2	2	6†	36	2.92	−0.74	1.60	7.0	3	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Ayres.
Williamson	Mingo	660	19	36.4	− 0.2	67	1	11	11	38	5.01	+1.01	1.50	6.5	9	10	10	11	w.	J. F. Keyser.
Averages and	extremes	.....	....	34.3	− 0.2	67	1†	−14	5	50	4.37	+0.51	3.00	6.1	8	15	4	12	w.	
State averages and	extremes	.....	....	34.1	+ 1.1	69	22	−16	5	50	3.79	−0.18	3.00	6.9	8	16	4	11	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

r Approximated by the observer.

Daily Precipitation for January, 1919.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac	*	*	1.75		.05				T.									.22					.60									2.62
Brandywine	do																																
Burlington	do	.70	*	.75						T.									.65					.34						T.			2.44
Harpers Ferry ‖‖	do	.60	.70	.71															.30						.76								3.07
Martinsburg	do	*	.60	.80			T.												.13					.92									2.45
Moorefield	do			.70															.35					.60					T.				1.65
Piedmont	do	.54	.21	.26						T.					T.	T.		T.	.12				T.	.61	.02					T.			1.76
Romney	do	.25		.48															.24					.80									1.77
Upper Tract	do	.40		.60	T					T	T.													.60						T.			1.60
Wardensville ‖‖	do	.46	.48	.51	T.		.03				T.						T.		.20					.55	.08					T.			2.31
Northern Division.																																	
Bens Run	Ohio	1.48	.32	.33					.12						.11			.12						.66									3.14
Brandonville ‖‖	Monongahela.																																
Buckhannon	do	1.20	1.10	.60					T.	.20					.25			T.	.20					.90						T			4.45
Central Station	Middle Is. Creek																																
Cortland ‖‖	Monongahela	1.40	1.00		.83														.80						.76								4.79
Creston ‖‖	Little Kanawha	1.17	1.55	.25	T.		T	T.	.03		T				.25			.20	.15					.20	.57								4.37
Davis ‖‖	Monongahela	1.05	.60	.50	.17					.08	.17				T.	.08	.04	.30						.92	T.					T.	.12		4.03
Elizabeth ‖‖	Little Kanawha	1.05	1.55	.22												.13		.10	.01						.75								3.81
Elkins***	Monongahela	1.47	.66	.50	.01		T.		.05	.20					.19	.06		.12	.23					.67	T.				T.	.04			4.20
Fairmont ‖‖	do	1.01	1.37	.50	T.	T.	T.	T.	.10		.02					.10		.10	.06					.10	.68					T.	T.		4.04
Glenville ‖‖	Little Kanawha	1.35	1.50	.55	.12											.25								T.	.85								4.62
Grafton	Monongahela	1.55	*	.70											.25									.84						T.			3.34
Lost Creek	do	1.50	.86	.50	T.		T.		T.	.09					.12			.20						.87	T.					T.			4.14
Mannington	do	1.88	.80	.50	T.		.01		.12	.02					.09	.05		.12	.02					.69	.01				T.	T.			4.31
Morgantown	do																																
Moundsville ‖‖	Ohio																																
New Cumberland	do	.90		.30	.03		T.		T.	.10					.26			.02						.38						.04			2.03
New Martinsville	do	1.59	.40	.28											.20									.75						T.			3.22
Parkersburg ***	Ohio	1.43	.07	.15	T.		T.	.01	.06	.02					.05			.06					T.	.63						T.			2.48
Parsons	Monongahela	T.	.08	1.50			T.		.08	.16					T.	.25		.02												.04			2.13
Philippi	do																																
Pickens	do	2.01	.25	1.08	.17		T.		.25	.33					T.	.17		.40	1.20					.72	T.					.08			6.66
Rowlesburg ‖‖	do	1.64	1.65	.64	.05	T.	T.	T.	.15		.08					.25		.07	.20	T.				T.	.72						.06		5.51
Saint Marys ‖‖	Ohio	.83	1.33	.26	T.				.12		.04				.08			.12						.13	.50								3.41
Smithfield ‖‖	Fishing Creek	.20	1.30	.44	.04						.03					.12		.20	.05					.30	.35					T.			3.03
Terra Alta	Monongahela	1.16	.89	.50	.17		T.		.08	.25					.05	.14		.07	.12					.54	.24					.08			4.29
Wellsburg	Ohio	.90	.08	.21					.05	T.					.05			T.						.42						T.			1.71
Weston	Monongahela	1.10	1.00	.70						.10					.10			.40						.80									4.20
Wheeling ‖‖	Ohio	.52	.65	.21	T.		T.	T.	.05		T.				.02	.02		.01	T.					.07	.46						T.		2.01
Southern Division.																																	
Bancroft ‖‖	Great Kanawha	1.39	1.59	.36	.09		T.				T.					.50		.05						.30	.45								4.70
Beckley	do																																
Bluefield	do	.50	1.30	1.37											.02	.18		.37	.25					.90	.08	.05							5.02
Breading	do	2.00	.84	.50		T.									.05	.14		.10	.30					1.04									4.97
Camden-on-Gauley ‖‖	do	1.70	T.	50	.41										.20	T.			1.00					1.20									5.01
Charleston ‖‖	do	1.45	1.58	.82	.10											.50		T.	.20					.20	.50								5.35
Clay ‖‖	do	1.80	.41	*				.10								.20								.15	.53								3.19
Cuba	Sand Creek	1.50	.35	.12			T.		T.	T.					.35			.05						.65						T.			3.02
Dam 19 O. R. ‖‖	Ohio	.85	1.57	.22	T.											.05		.04	.01					.17	.61								3.52
Dam 20 O. R. ‖‖	do	.78	1.34	.22	T.											.20		.08	T.					.20	.60	T.							3.42
Dam 22 O. R. ‖‖	do	.95	1.48	.24												.12		.08							.56								3.43
Dam 26 O. R. ‖‖	do	1.20	1.60	.20					.20							.21		.10						*	.60								4.11
Elkhorn	Big Sandy																																
Evans	Ohio	1.59	.68	.27										.20	.03									.84									3.61
Gary ‖‖	Big Sandy	1.85	.60	.20											.35	.10		.60					.10										3.80
Green Sulpr. Spgs.	Great Kanawha																																
Hinton ‖‖	do	1.12	1.14	.32	T.		.06		T.		.02					.06		.04	.48					.14	.84								4.22
Holcomb	do	*	*	2.59		*	.03		*	.04					*	.32		*	.67					*	.85								4.50
Huntington ‖‖	Ohio	1.42	1.58	.32	.02				.06							.18		.04						.17	.46	T.							4.25
Kanawha Falls ‖‖		1.85	1.04	.65	T.											T.		T.	.50	T.				T.	.80								4.84
Kayford ‖‖	Great Kanawha	1.78	1.17	.34	.06		.02		.09							.31	T.	.06	.49					.16	.63								5.11
Lewisburg	do	1.12	1.38	.40		T.				T.								.61	.37					.99									4.87
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do	2.30	.90	.80		T				.05					T.	T.		.15	.65					.99						T.			5.84
Point Pleasant ‖‖	Ohio	1.30	1.52	.27					.17							.21		.05					.22	.48	.56								4.78
Powellton		1.26	1.12	.76					.09						.05	.24		.06						.65									4.23
Raleigh ‖‖	Great Kanawha	1.29	.67					.08		.01					.17		.09	.47	T.				.37	.90									4.05
Renick ‖‖	do	2.60	1.00	.75		T.													.70						.95								6.00
Robertsburg ‖‖	do	1.30	1.52	.27					.17							.21		.05					.22	.48									4.22
Ryan	do	1.76	1.00	.41	.05		.01		.10	.01					.15	.10		.06	.07					.86									4.58
Sissonville ‖‖	do																																
Spencer ‖‖	Little Kanawha	1.54	1.51	.36												.29		.09	.04						.16									3.99
Sutton	Great Kanawha	.12	1.45	.72	.16				T.	.09					.34	.28			.52					.84									4.52
Union	do		1.60	.42																				.90									2.92
White Sulphur Spgs.	do																																
Williamson ‖‖	Big Sandy	1.50	1.41	.45	.08		.03	T.								.40		T.	.45					.29	.40								5.01

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for January, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum																																
	Minimum																																
Brandywine	Maximum	55	60	35	17	18	30	38	43	40	40	50	45	49	50	42	55	52	55	56	57	64	63	57	52	58	55	53	52	48	58	51	48.3
	Minimum	40	35	17	− 6	−10	− 6	6	17	15	0	19	15	17	24	31	18	29	34	29	22	24	24	35	31	22	37	22	25	26	17	18	20.2
Burlington	Maximum	56	56	33	17	13	27	39	40	34	42	44	33	42	48	41	50	52	54	53	52	56	54	43	44	53	57	53	54	45	57	49	44.9
	Minimum	33	32	15	3	−10	− 1	3	8	12	12	29	17	10	23	31	22	27	37	33	22	23	24	33	33	25	36	32	28	29	22	26	21.6
Martinsburg§	Maximum	55	42	30	13	17	25	35	33	36	41	45	28	38	47	37	48	53	55	51	50	55	40	45	46	53	53	56	56	37	55	51	43.2
	Minimum	29	41	28	8	− 3	0	5	9	23	13	15	14	15	16	28	28	30	37	41	26	27	30	32	38	30	31	41	32	32	25	27	24.1
Moorfield	Maximum	62	63	35	20	15	31	43	48	40	43	54	45	52	53	47	54	51	58	60	62	60	60	57	51	55	57	58	....	48	64	57	50.1
	Minimum	35	34	20	1	−10	− 4	− 4	20	19	10	20	22	13	25	33	19	27	38	33	25	25	25	34	36	25	38	43	....	28	18	27	22.5
Piedmont	Maximum	51	56	32	16	15	28	38	37	34	39	43	39	42	46	44	50	49	53	55	49	53	54	45	46	51	49	53	54	46	55	49	44.2
	Minimum	33	31	16	3	− 4	5	12	26	19	9	32	19	12	26	31	29	33	38	40	25	27	28	35	34	29	36	38	31	27	24	27	24.9
Romney	Maximum	42	58	38	35	30	32	46	44	39	44	45	47	46	51	47	53	53	59	57	54	58	59	45	43	59	50	56	60	57	58	59	49.2
	Minimum	22	36	22	2	−10	− 2	4	22	20	7	34	18	10	32	32	22	27	38	39	23	25	25	35	24	26	44	29	29	25	35	32	23.5
Upper Tract	Maximum	56	59	40	18	18	29	30	40	37	39	48	52	53	54	59	58	58	54	54	55	67	63	60	51	58	60	53	52	52	57	53	49.6
	Minimum	41	17	17	− 3	−11	− 5	10	17	17	9	9	14	15	18	22	23	23	32	34	28	23	25	26	33	29	24	25	27	26	20	25	19.7
Wardensville§	Maximum	62	41	26	20	14	35	40	43	34	47	50	45	....	54	36	58	59	56	58	60	62	52	48	57	52	56	55	41	60	52	..	47.3
	Minimum	18	40	25	− 3	− 8	0	− 7	1	15	7	13	19	12	....	33	20	22	32	39	22	28	31	39	39	33	38	28	27	19	23	26	21.0
Northern Division.																																	
Bens Run	Maximum	61	48	30	14	25	28	41	42	33	37	46	44	53	45	43	50	46	52	54	60	56	65	51	45	42	52	53	38	40	52	48	45.0
	Minimum	47	29	11	6	1	13	21	32	21	10	24	19	23	33	28	23	33	35	33	27	28	30	38	32	26	33	26	30	28	22	24	25.4
Buckhannon	Maximum	63	55	30	14	22	25	40	40	32	32	40	46	50	44	39	47	52	48	50	51	59	58	50	43	57	47	48	50	45	51	45	44.3
	Minimum	40	29	14	1	− 9	7	12	32	19	0	20	14	20	31	30	25	40	30	33	26	27	28	38	32	25	36	22	30	28	17	22	23.2
Creston	Maximum	59	52	31	18	24	28	41	41	34	37	42	46	52	47	42	48	45	47	52	59	58	60	53	45	54	52	51	52	48	54	50	45.9
	Minimum	47	31	16	6	0	13	16	33	26	11	20	20	21	30	30	....	....	....	....	26	27	29	38	35	25	32	22	29	28	19	21	24.1
Elkins	Maximum	61	47	25	7	16	21	42	40	28	39	40	47	52	47	34	50	17	49	50	61	60	59	48	34	58	49	47	48	34	52	44	43.1
	Minimum	46	25	4	− 8	−14	8	14	18	10	− 1	19	12	16	27	27	17	27	38	30	25	25	26	34	30	24	33	28	27	20	14	26	20.2
Fairmont§	Maximum	61	34	21	12	31	29	43	33	32	34	44	50	55	43	33	48	48	55	54	63	62	63	50	42	53	52	55	53	33	53	49	44.8
	Minimum	43	34	18	1	− 3	7	17	29	28	6	8	17	19	21	32	23	24	40	32	25	25	26	28	41	25	26	23	25	27	21	21	22.9
Glenville	Maximum	62	63	30	16	28	30	46	42	35	42	50	54	58	47	43	55	45	56	58	66	65	69	58	46	58	54	58	57	50	58	33	50.1
	Minimum	48	29	15	− 4	− 8	8	12	33	25	7	18	16	18	27	30	18	25	39	27	25	23	25	36	33	22	30	18	26	28	16	20	22.1
Grafton	Maximum	62	56	32	15	24	25	41	41	34	33	39	47	52	44	41	48	48	59	51	55	60	60	54	45	54	54	51	52	49	52	48	46.0
	Minimum	44	29	13	− 4	− 9	8	15	31	20	4	20	13	18	28	29	21	27	38	29	29	33	25	35	33	24	23	27	28	27	18	22	22.5
Lost Creek	Maximum	67	62	29	13	20	25	43	41	32	36	46	53	56	45	40	51	50	54	55	63	62	65	54	44	54	53	54	52	48	55	50	47.5
	Minimum	48	28	12	− 7	−13	1	10	32	21	− 4	18	13	15	29	30	19	35	26	33	22	22	24	36	33	20	30	21	29	26	16	18	20.7
Mannington	Maximum	61	57	29	14	25	24	40	41	32	34	41	47	53	44	40	48	46	54	53	62	61	63	50	44	53	51	53	54	43	53	48	45.7
	Minimum	47	29	14	− 3	−12	3	20	32	21	1	18	14	16	30	31	21	29	38	29	24	24	26	35	33	23	30	21	27	27	17	18	22.0
Morgantown	Maximum																																
	Minimum																																
New Cumberland	Maximum	58	46	27	15	21	25	37	36	30	34	40	37	46	44	36	47	49	53	47	60	56	62	54	40	52	50	55	52	40	50	42	43.3
	Minimum	43	26	10	0	− 4	1	10	30	7	5	25	9	20	35	30	28	24	31	29	19	25	26	40	33	21	29	26	24	25	27	25	21.9
New Martinsville	Maximum	61	52	31	29	29	27	42	40	38	38	42	44	55	47	46	48	46	54	55	62	58	64	58	54	52	52	55	54	47	53	50	47.8
	Minimum	47	29	15	5	− 1	9	22	33	21	8	21	18	22	36	32	22	34	38	30	26	28	28	38	35	26	31	27	30	30	22	23	25.3
Parkersburg	Maximum	61	40	23	13	23	27	42	37	31	37	43	49	54	48	34	49	48	54	54	60	61	63	51	42	50	50	53	54	35	52	48	44.7
	Minimum	40	23	9	5	5	13	23	30	18	14	30	22	29	34	28	26	40	35	35	30	31	33	36	32	28	34	30	33	26	25	24	26.5
Parsons	Maximum	60	53	29	11	19	21	44	37	31	36	42	44	52	42	37	40	43	51	53	64	62	62	47	42	60	55	51	51	41	55	48	44.6
	Minimum	36	29	11	3	−14	5	5	20	14	− 6	10	11	10	23	29	25	22	35	33	22	21	23	33	25	22	25	19	25	25	9	20	18.4
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum	46	46	27	10	24	21	37	37	27	37	39	45	47	40	33	46	45	45	48	54	60	57	43	37	57	45	43	47	39	44	39	40.8
	Minimum	45	27	5	− 8	−11	6	11	21	12	− 5	15	15	24	20	23	14	24	37	30	27	33	33	34	26	23	29	27	27	20	13	20	19.9
Terra Alta	Maximum	56	56	27	11	28	19	36	34	26	26	36	38	45	42	36	42	41	46	47	56	58	57	51	44	56	48	46	47	41	47	41	41.4
	Minimum	44	26	10	− 4	−16	− 3	8	25	13	− 2	23	16	10	31	24	20	28	37	33	22	26	28	35	26	23	32	30	27	19	13	25	20.3
Wellsburg	Maximum	60	52	36	14	22	25	39	40	33	35	38	40	51	47	38	45	47	50	46	57	56	54	50	43	49	51	47	47	47	48	46	43.6
	Minimum	44	28	14	1	− 5	− 1	22	30	19	5	28	10	18	36	31	26	30	32	28	21	23	26	35	35	23	25	27	29	26	17	20	22.7
Weston	Maximum	63	59	31	15	22	24	42	42	34	36	44	49	55	48	42	50	48	50	54	64	65	63	56	44	54	51	54	50	49	55	51	47.2
	Minimum	48	29	13	0	− 7	9	14	33	23	3	21	18	21	32	32	32	30	32	33	26	27	29	39	33	24	34	30	23	21	21	22	24.0
Wheeling§	Maximum	60	30	26	25	28	33	40	35	30	37	43	43	56	46	35	50	50	57	54	64	48	64	50	42	53	53	58	55	37	54	49	45.3
	Minimum	43	30	17	3	0	− 2	10	30	27	8	12	15	14	22	32	28	27	33	32	27	29	29	32	35	26	27	27	27	29	27	23	23.2
Southern Division.																																	
Beckley	Maximum																																
	Minimum																																
Bluefield	Maximum	59	64	32	18	16	32	42	39	33	37	45	50	51	46	45	59	52	49	50	62	64	64	56	47	53	54	56	49	45	54	52	47.7
	Minimum	42	31	13	− 2	− 2	7	15	31	21	9	21	21	26	33	26	19	32	40	36	32	29	32	46	30	32	35	25	32	29	27	30	25.7
Charleston	Maximum	59	62	58	53	51	47	46	45	44	41	42	54	56	55	52	55	52	57	60	64	64	65	61	57	58	55	56	54	55	57	61	54.7
	Minimum	25	28	23	5	1	4	10	11	28	23	20	19	21	23	32	21	25	37	30	27	29	30	27	29	27	30	24	24	29	25	27	23.0
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum																																
	Minimum																																
Hinton§	Maximum	65	41	24	27	19	27	33	40	30	29	45	41	44	40	34	41	39	52	52	55	58	57	50	53	51	50	53	52	40	47	....	42.8
	Minimum	33	40	22	2	0	5	6	6	20	8	10	16	20	19	25	22	21	33	29	28	28	29	28	34	29	30	24	25	29	20	20	21.3
Holcomb§	Maximum	60	50	26	28	24	30	44	36	27	40	43	48	54	38	29	50	40	49	53	61	62	62	48	40	57	44	54	48	33	56	48	44.6
	Minimum	44	46	18	10	8	5	9	16	15	0	3	8	11	20	26	13	14	25	22	25	26	28	30	30	25	20	19	21	26	16	19	19.3
Huntington§	Maximum	60	31	19	14	23	30	33	33	34	27	41	27	53	46	34	40	40	56	54	42	37	39	40	42	10	40	38	53	41	56	51	39.2
	Minimum	46	31	18	7	6	6	20	27	30	16	20	26	26	27	33	23	23	39	36	34	33	28	28	27	34	36	35	35	30	26	28	26.9
Lewisburg	Maximum	54	56	32	15	16	24	33	36	31	34	43	39	45	38	38	39	39	49	53	54	59	56	50	47	49	47	52	49	43	54	51	42.7
	Minimum	36	32	13	− 5	−11	2	− 5	18	12	5	19	16	11	20	27	13	28	36	33	24	23	25	37	31	24	37	24	24	27	20	29	20.2
Marlinton	Maximum	46	44	32	6	12	20	30	32	24	30	40	34	40	38	34	38	38	44	48	52	54	50	42	38	46	42	46	44	32	50	42	37.7
	Minimum	32	30	6	− 6	−14	− 6	− 4	16	8	− 4	12	8	6	16	18	8	22	34	26	20	20	22	32	28	20	14	16	20	22	12	16	14.5
Point Pleasant	Maximum	62	44	31	18	25	28	43	36	34	42	48	54	57	47	35	52	48	56	59	64	67	58	47	46	54	55	58	56	47	58	55	47.9
	Minimum	44	31	18	6	3	5	13	13	28	12	15	22	22	25	22	21	24	38	20	28	28	28	36	35	25	33	24	30	27	24	23	23.3
Powellton	Maximum	60	60	32	19	24	29	37	40	39	36	40	44	47	48	42	42	43	52	53	52	52	53	53	50	51	52	52	50	50	53	53	45.4
	Minimum	47	31	17	6	0	14	16	33	25	14	22	22	26	31	32	23	33	40	32	30	31	33	42	36	37	35	25	32	32	23	28	24.1
Robertsburg§	Maximum	62	32	21	8	25	28	43	36	34	42	48	54	57	47	35	52	48	56	59	64	67	58	47	....	56	50	57	58	41	57	52	46.5
	Minimum	44	31	18	6	3	5	13	13	28	12	15	22	22	25	22	21	24	38	20	28	28	28	36	26	....	27	23	24	28	23	23	22.5
Ryan	Maximum	60	50	27	15	25	28	42	35	32	38	45	48	53	45	41	50	48	54	57	62	63	64	49	44	57	52	53	53	47	56	52	46.6
	Minimum	47	27	15	4	− 7	11	5	30	22	8	17	18	19	23	29	18	28	35	26	24	24	28	37	33	23	21	18	27	23	17	17	21.5
Spencer§	Maximum	61	31	24	15	25	29	44	35	22	40	40	50	56	47	49	59	50	55	56	63	65	65	65	48	58	51	41	55	38	51	52	46.5
	Minimum	45	31	24	3	− 4	14	14	29	20	10	14	20	20	24	32	21	49	30	30	26	26	27	40	38	25	26	22	24	24	20	20	24.0
Sutton	Maximum	63	63	36	21	12	22	42	42	41	38	46	46	47	47	39	51	41	53	55	62	65	65	66	60	60	62	62	60	50	55	55	49.8
	Minimum	36	30	16	− 1	− 8	4	6	28	22	4	14	15	18	26	29	18	28	37	27	25	22	20	31	32	24	22	21	20	27	16	18	20.2
Union§	Maximum	60	62	37	20	15	22	33	37	38	37	44	45	42	43	41	43	45	49	50	57	58	59	57	50	55	56	54	52	46	56	55	45.7
	Minimum	38	33	17	3	9	2	2	11	12	2	19	20	19	20	27	15	28	38	37	23	24	25	38	29	24	25	23	21	26	20	22	21.0
White Sulphur Spgs.	Maximum																																
	Minimum																																
Williamson§	Maximum	67	34	26	27	27	30	41	39	34	43	41	54	58	40	40	50	45	55	60	58	63	63	50	50	55	54	51	54	46	62	57	47.5
	Minimum	40	31	20	20	13	21	15	15	25	16	11	21	25	25	31	23	23	35	30	30	30	30	32	35	30	30	27	27	28	24	25	25.4

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
Based on about 650 records.
M.G.

1.05
WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

FEBRUARY, 1919

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MARCH 27, 1919

Departure of the Mean Temperature from the Normal, February, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXVII. PARKERSBURG, W. VA., FEBRUARY, 1919. No. 2

GENERAL SUMMARY.

The temperature for February averaged considerably above the normal, the month was free from cold periods, and the precipitation was the lightest of record for February, except in 1893, 1894, 1901, and 1906. The snowfall was the lightest of February record, except in 1909. The precipitation was favorably distributed over the State and throughout the month. In many of the agricultural districts only traces of snow were received. The conditions were exceptionally favorable for outdoor work and spring plowing was well advanced. Winter grains were damaged in some districts, owing to a lack of snow cover; but in most localities wheat and rye had a good stand at the close of the month, as these grains made excellent and hardy growth in the late fall. March opened with a good outlook for fruit.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.04 and 30.06 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.63 inches on the 19th, and 29.28 inches on the 14th. Elkins, 30.59 inches on the 19th, and 29.28 inches on the 14th.

TEMPERATURE.

The monthly mean for the State, 42 stations reporting, was 35.2°. The departure from the normal for 37 stations having ten or more years of record was +3.3°. Seasonally warm weather prevailed on the 3-4th, 12-14th, 21st-25th, and 28th, and the highest temperatures occurred in practically all sections on the 28th. While there were no decidedly cool periods, the temperatures were slightly deficient or near the normal at the beginning of the month, from the 5th to the 11th, 16th to the 20th, and the 25th to the 27th, with the lowest readings occurring generally on the 11th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 80 per cent; 8 p. m., 69 per cent. The February averages for the same hours for the past 30 years are 83 and 75 per cent, respectively. Elkins, 8 a. m., 84 per cent; 8 p. m., 73 per cent. The February averages for Elkins for the same hours for the past 18 years are 84 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 60 stations reporting, was 1.85 inches. The departure from the normal for 42 stations having ten or more years of record was —1.20 inches. Most of the precipitation was received on the 4th, 8th, 13-16th, 21st-23d, and 25th. Snow flurries or light snow occurred in many sections on the 8th, 10th, 15-18th, and 26th.

WIND.

The average wind velocity at Parkersburg was 6.2 miles per hour, or 1.2 miles below the February average for the past 29 years. The average at Elkins was 6.2 miles per hour, or 0.7 mile above the February average for 20 years. The highest velocity at Parkersburg was 30 miles per hour from the southeast on the 22d, and at Elkins 34 miles per hour from the west on the 28th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 33 per cent of the possible amount, or 4 per cent below the February average for 21 years. The average at Elkins was 48 per cent, or 13 per cent above the February average for 19 years.

MISCELLANEOUS PHENOMENA.

Aurora: Burlington, Piedmont and Robertsburg, 27th.

Fogs, dense: Bayard, 14th; Elkins, 22d; New Cumberland, 2d, 3d, 4th, and 11th; Rowlesburg, 22d; Terra Alta, 4th and 22d; Smithfield, 13th and 14th; Wheeling, 2d, 6th, 7th, 11th, and 25th; Williamson, 1st, 2d, 3d, 4th, 5th, 6th, 12th, 20th, 27th, and 28th.

Hail: Ryan and Terra Alta, 14th.

Halo, lunar: Elkins, 7th and 12th; Holcomb, 11th; Parkersburg, 12th.

Halo, solar: Elkins, 20th.

Sleet: Bayard, 13th; Bluefield, 21st; Davis, 24th; Elkins, 20th; Terra Alta, 15th; Wellsburg, 16th; Wheeling, 28th.

Thunderstorms (dates and number of stations reporting): 13th, 1; 14th, 6; 15th, 1; 22d, 2; 23d, 3; 28th, 5.

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	38.1	.....	.....	5.39	....	....	....	..	..	..
1892	37.1	72	−12	2.30	....	....	....	..	..	..
1893	35.0	71	− 6	4.81	6.70	1.65	....	..	..	..
1894	33.4	74	− 5	3.99	7.48	2.05	....	9	7	12
1895	22.8	79	−17	1.27	2.44	0.61	....	10	9	9
1896	33.4	62	− 5	3.31	6.23	1.50	....	7	8	14
1897	36.8	70	3	5.95	8.18	3.00	....	7	7	14
1898	32.7	74	−13	1.84	3.38	0.64	....	10	8	10
1899	26.1	69	−35	4.32	6.43	2.25	19.0	7	5	16
1900	30.7	83	−11	3.94	5.62	2.31	10.1	5	10	13
1901	27.1	62	− 6	0.86	1.66	0.10	4.1	8	8	12
1902	26.7	68	−14	3.20	5.65	1.33	8.1	6	7	15
1903	35.3	74	−19	5.99	9.59	2.58	8.6	10	6	12
1904	29.3	80	−13	2.37	4.55	0.52	8.1	12	9	8
1905	25.6	56	−22	2.34	4.65	0.80	8.1	8	6	14
1906	32.4	79	−11	1.60	3.34	0.46	8.1	15	6	7
1907	31.1	68	−23	2.55	4.83	0.67	11.1	9	8	11
1908	30.9	72	−10	3.72	6.26	1.77	15.8	7	8	14
1909	40.4	80	− 5	4.16	7.68	1.44	3.4	7	8	13
1910	31.5	72	−11	3.18	6.56	0.98	13.5	9	8	11
1911	38.7	76	− 6	2.03	3.92	0.40	4.8	8	8	12
1912	27.3	70	−17	2.45	5.08	0.72	6.4	10	8	11
1913	32.6	80	− 4	2.27	6.15	0.21	4.7	13	6	9
1914	28.4	70	−22	3.64	6.96	1.63	19.7	9	7	12
1915	38.4	72	− 2	3.07	6.33	0.90	3.6	10	5	13
1916	31.4	72	−12	4.30	9.19	1.79	13.2	8	6	15
1917	31.0	80	−14	3.29	7.73	1.26	10.1	9	7	12
1918	35.4	81	−19	3.12	6.60	0.45	3.8	11	6	11
1919	35.2	72	− 2	1.85	3.93	0.35	3.5	11	5	12
Means and extremes ..	32.2	83	−35	3.21	9.59	0.10	8.9	9	7	12

Climatological Data for February, 1919.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	18	27.5	+ 0.2	63	28	− 2	20	40	1.98	−1.54	0.64	16.5	14	10	4	14	w.	G. C. Dixon.
Brandywine	Pendleton	3	35.4	.....	61	28	6	11	37	0.95	.....	0.25	5.0	8	16	5	7	s.	Elmer Keister.	
Burlington	Mineral	875	25	34.0	+ 3.6	63	28	10	11	41	1.77	−0.52	0.68	4.0	7	12	8	8	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	30	.....	.....	.....	.....	.....	.....	.....	1.47	−1.15	0.45	2.5	7	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	27	34.8	+ 5.0	59	28	19	11	33	1.86	−0.62	0.68	2.3	7	20	2	6	w.	G. W. Van Metre, C. E
Moorefield	Hardy	900	23	37.6	+ 6.2	69	28	10	11	40	1.14	−1.36	0.23	1.5	9	23	3	2	.....	M. S. Henkel.
Piedmont	Mineral	919	6	34.4	.....	65	28	11	11	41	1.71	.....	0.34	4.8	11	11	11	6	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	21	37.4	+ 5.9	68	28	10	11	47	1.40	−0.87	0.40	2.0	7	10	8	10	w.	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	20	33.6	+ 1.5	56	4	11	11	35	0.35	−1.37	0.25	.....	2	14	5	9	w.	J. M. Mallow.
Wardensville††	Hardy	1,200	1	.....	.....	.....	.....	.....	.....	.....	1.32	.....	.....	1.0	.....	.....	.....	.....	.....	Luther F. Sutton.
Averages and	extremes	.....	....	34.3	+ 3.7	69	28	− 2	20	47	1.40	−1.06	0.68	4.8	8	14	6	8	w.	
Northern Division.																				
Bens Run	Pleasants	622	17	36.0[a]	+ 4.7	67	28	17[a]	2†	36[a]	1.56	−1.76	0.42	3.0	8	14	3	11	.....	J. D. Riggs.
Brandonville	Preston	1,809	8	.....	.....	.....	.....	.....	.....	.....	2.89	.....	0.70	14.5	11	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	22	34.6	+ 3.4	65	28	12	9†	46	2.10	−1.74	0.60	4.0	8	15	2	11	.....	H. A. Darnall.
Cortland	Tucker	3,300	3	.....	.....	.....	.....	.....	.....	.....	1.56	.....	0.55	.....	5	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	17	37.2	+ 5.0	64	22	14	6	39	1.61	−1.28	0.41	1.0	9	8	4	16	sw.	J. M. Reed.
Davis	Tucker	3,093	10	.....	.....	.....	.....	.....	.....	.....	2.77	.....	0.73	14.5	13	14	2	12	.....	Ross C. Male.
Elizabeth	Wirt	646	7	.....	.....	.....	.....	.....	.....	.....	1.16	.....	0.38	.....	7	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	18	31.9	+ 0.4	62	28	5	11	36	2.04	−1.13	0.51	6.5	17	6	7	15	w.	U. S. Weather Bureau.
Fairmont	Marion	883	13	34.0	+ 1.5	70	28	11	11	49	1.57	−1.34	0.30	1.0	11	15	1	12	w.	F. P. Hall.
Glenville	Gilmer	738	25	37.7	+ 5.5	70	28	11	2	45	1.80	−1.99	0.43	1.0	6	12	4	12	w.	Howard R. Brannon.
Grafton††	Taylor	1,000	26	35.0	+ 3.6	62	28	7	11	37	1.48	−1.87	.....	.....	8	9	10	9	e.	W. C. Byers.
Lost Creek	Harrison	1,026	21	35.0	+ 4.5	68	28	9	11	43	1.56	−1.38	0.34	2.5	8	13	2	13	w.	Allen Smith.
Mannington	Marion	974	16	34.8	+ 4.3	67	28	9	11	47	1.81	−0.83	0.37	4.4	13	8	7	13	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. W. Muldoon.
Moundsville	Marshall	642	16	.....	.....	.....	.....	.....	.....	.....	2.30	+0.07	0.60	1.5	9	11	0	17	sw.	M. Z. White.
New Cumberland	Hancock	987	21	32.8	+ 5.5	64	28	8	11	51	1.57	−0.95	0.44	3.1	11	6	12	10	nw.	M. F. Smith.
New Martinsville	Wetzel	634	25	36.8	+ 4.8	68	28	14	11	38	1.40	−1.64	0.45	T.	5	12	2	14	s.	Wm. Ankrom.
Parkersburg	Wood	638	32	35.8	+ 1.8	66	28	18	6	30	1.76	−1.48	0.43	1.6	14	6	3	19	..e.	U. S. Weather Bureau.
Parsons	Tucker	1,656	19	32.6	+ 3.3	67	28	− 2	11	45	1.79	−1.66	0.35	8.0	6	12	7	10	.....	J. W. Swisher.
Philippi	Barbour	1,149	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Attie G. Robinson.
Pickens	Randolph	2,697	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	32	.....	.....	.....	.....	.....	.....	.....	2.80	−0.38	0.64	.....	14	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	10	.....	.....	.....	.....	.....	.....	.....	1.66	−1.74	0.36	1.0	8	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	13	29.9	− 1.0	52	28	9	11	35	1.94	−1.69	0.30	7.5	13	16	4	8	nw.	G. M. Whisler.
Terra Alta	Preston	2,612	18	30.0	+ 3.8	61	28	9	9	35	2.76	−1.31	0.39	13.5	16	14	5	9	w.	Charles W. Gray.
Wellsburg	Brooke	1,225	18	33.0	+ 5.9	65	28	8	11	41	1.31	−1.76	0.29	1.0	12	9	5	14	w.	George P. Pfister.
Weston	Lewis	1,026	23	36.4	+ 5.0	67	28	11	11	39	1.93	−1.88	0.65	3.0	10	5	12	14	.....	Weston State Hospital.
Wheeling	Ohio	645	32	33.4	+ 2.6	66	28	11	10	45	1.38	−1.21	0.23	2.6	13	7	3	18	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	34.2	+ 3.6	70	28	− 2	11	51	1.88	−1.36	0.73	4.5	10	11	4	13	w.	
Southern Division.																				
Bancroft	Putnam	574	15	39.2[b]	.....	68[b]	28	15	7	47[b]	1.70	−1.34	0.60	0.5	8	18	0	10	nw.	R. E. Dent.
Beckley	Raleigh	2,440	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John A. Ewart.
Bluefield	Mercer	2,558	24	36.6	+ 3.5	61	28	13	11	34	2.75	−0.38	0.45	6.0	15	6	11	11	.....	Norfolk & Western Ry.
Breading	Mingo	507	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	4	.....	.....	.....	.....	.....	.....	.....	3.82	.....	2.00	7.3	8	6	0	22	n.	Miss Katie Jarvis.
Charleston	Kanawha	597	16	39.6	+ 1.2	72	28	10	10	52	3.00	−0.57	0.83	T.	9	16	0	12	w.	C. V. Lewis.
Clay	Clay	706	3	.....	.....	.....	.....	.....	.....	.....	1.22	.....	0.45	T.	7	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	17	37.4	+ 4.9	69	28	13	6	45	1.22	−1.83	0.35	1.5	7	7	11	10	nw.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	3	.....	.....	.....	.....	.....	.....	.....	1.61	.....	0.30	1.4	10	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	3	.....	.....	.....	.....	.....	.....	.....	1.55	.....	0.29	.....	11	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	4	.....	.....	.....	.....	.....	.....	.....	1.26	.....	0.38	1.4	9	.....	.....	.....	.....	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	3	.....	.....	.....	.....	.....	.....	.....	0.81	.....	0.25	0.9	9	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans	Jackson	606	7	38.9	.....	62	22†	18	6	32	1.66	.....	0.34	1.0	8	11	1	16	.....	B. F. Sayre.
Gary	McDowell	1,426	3	.....	.....	.....	.....	.....	.....	.....	2.35	.....	0.90	0.4	13	.....	.....	.....	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs.	Summers	1,600	23	34.6	+ 2.4	58	24	10	8	39	3.93	+1.37	1.54	8.0	12	7	5	16	w.	W. H. Gwinn.
Hinton	do	1,450	22	34.4	+ 0.1	60	28	17	2†	38	2.46	−0.64	0.64	T.	10	11	1	16	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	7	32.4	.....	62	28	8	11	47	2.34	.....	0.45	11.0	13	8	1	19	.....	R. C. Ferguson.
Huntington	Cabell	538	25	35.6	+ 3.4	66	22	20	6†	43	1.52	−1.59	0.42	0.5	11	13	0	15	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	0	.....	.....	.....	.....	.....	.....	.....	0.68	.....	0.33	T.	3	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	3	.....	.....	.....	.....	.....	.....	.....	1.62	.....	0.65	2.7	9	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	19	34.0	+ 2.1	57	14†	12	2	37	2.35	−0.56	0.71	2.5	8	9	7	12	nw.	Geo. T. Argabate.
Logan	Logan	687	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton††	Pocahontas	2,131	20	29.1	− 0.2	52	14†	6	2†	36	3.41	−0.02	0.72	7.5	10	4	13	11	sw.	S. L. Brown.
Point Pleasant	Mason	553	26	38.1	+ 4.9	68	22	16	6†	38	1.09	−2.50	0.32	T.	7	10	6	12	.....	W. D. Holmes.
Powellton	Fayette	933	23	37.6	+ 2.3	61	28	18	2	30	1.42	−1.55	0.30	T.	8	9	8	11	w.	J. F. Campbell.
Raleigh ††	Raleigh	2,130	3	.....	.....	.....	.....	.....	.....	.....	3.34	.....	0.72	3.8	12	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	3	.....	.....	.....	.....	.....	.....	.....	2.96	.....	1.00	0.1	6	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	19	35.8	+ 3.1	68	28	13	9	45	1.20	−2.01	0.32	0.5	7	11	3	14	sw.	E. C. Brace, Jr.
Ryan	Roane	700	16	35.4	+ 2.3	67	28	11	6	41	1.90	−1.55	0.53	3.9	13	8	1	19	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer ††	Roane	784	15	45.3	+ 2.8	67	28	15	2†	41	2.03	−1.10	0.96	T.	5	9	9	10	.....	A. M. McKown.
Sutton	Braxton	839	13	36.2	− 2.1	64	27†	10	11	46	2.09	−1.37	0.40	4.0	11	17	8	3	.....	C. B. Eakle.
Union	Monroe	2,250	15	36.1	+ 3.6	64	3	12	2†	46	3.10	+0.53	1.50	.....	4	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Ayres.
Williamson	Mingo	660	19	37.5	+ 1.4	68	22	18	11	40	1.59	−1.63	0.33	T.	8	9	6	13	w.	J. F. Keyser.
Averages and	extremes	.....	....	36.5	+ 2.7	72	28	8	11	52	1.97	−1.04	2.00	2.2	9	10	4	14	w.	
State averages and	extremes	.....	....	35.2	+ 3.3	72	28	− 2	11†	52	1.85	−1.20	2.00	3.5	9	11	5	12	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

c Approximated by the observer.

Daily Precipitation for February, 1919.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac				.11				.20	.01	.08			.19	.03	.08	.16	T.	.64	.05			.04	.12		.19	.08							1.98
Brandywine	do				.05				.24					*	.25							.16	.15			*	.10						0.95
Burlington	do				.15				.10					.15					.10			.20		T.		.68			.39				1.77
Harpers Ferry ‖	do				.22			.10							.45	.30						.15		.10		.15							1.47
Martinsburg	do				.27				.03					*	.68			T.				.23	.18			.47							1.86
Moorefield	do				.23				.04					.20	.08							.08	.20	.05		.09	.17						1.14
Piedmont	do				.15				.16		T.			.27	.19	.04	T.	T.	.07			.34	.06	.12		.14	.17						1.71
Romney	do				.18				.08					*	.43						.08	.23				.40							1.40
Upper Tract	do								T						.25	T.	T.		T.			T.					.10						0.35
Wardensville ‖	do			.23					.08						.40							*	*	*	*	*	.61						1.32
Northern Division.																																	
Bens Run	Ohio								.16					.42	.12	.20	.12					.31		.09		.14							1.56
Brandonville ‖	Monongahela				.30			.24			.16			*	.55	.32	.08		.20	.16		.18	T.				.70						2.89
Buckhannon	do				.40				.20		.10			.40	.15	.15	.10	T.	T.							.60	T.						2.10
Central Station	Middle Is. Creek																																
Cortland ‖	Monongahela			.10										.42		.20					.29						.55						1.56
Creston ‖	Little Kanawha				.25	.03			.02	T.	T.	T.	T		.40	.41	.05		T.			.10	T.	.15			.20						1.61
Davis ‖	Monongahela				.03				.12	.02	.16	.02			.33	.16	.08	.16	.20	.13			.73		T.		.63						2.77
Elizabeth ‖	Little Kanawha				.20				.06				.08			.38	.04							.19			.21						1.16
Elkins ***	Monongahela			.06	.23			.04	.14	T.	.01	T.		.12	.12	.08	.08	.03	.09	T	.09	.13	.06	.07		.51			.18				2.04
Fairmont ‖	do				.22	.08			.08	T.	T.	T	.02		.21	.27	.11	T.	T.	T.	T.	.15	.12	.11			.30						1.67
Glenville ‖	Little Kanawha				.43				.10	T.					.12	.43											.40						1.80
Grafton	Monongahela				.47				T.		*			.25	*	*		T.	T.					.26	*	.50							1.48
Lost Creek	do				.30				.12		T.			.23	.20	.11	.05	T.	T			.21	T.			T.	.34						1.56
Mannington	do				.28				.09		T.		.02	.17	.21	.20	.12	T.	.03			.17	.07	.08		.03	.34						1.81
Morgantown	do																																
Moundsville ‖	Ohio				.60				.08					.38	.22			.04				.35	.10		.20				.33				2.30
New Cumberland	do				.12				.15				.01	.17	.02	.04	.04	T.	.04			.44		.43		.11	T.						1.57
New Martinsville	do				.25				T.		T.			.30	.45	.25		T.	T.							.15							1.40
Parkersburg ***	Ohio			.07	.10			T.	.10	T.		.01		.14	.13	.16	.01	.02	T.		.06	.21	.17			.15			.43				1.76
Parsons	Monongahela				.35				.32		T.			.30				T.	.32			.30				.20							1.79
Philippi	do																																
Pickens	do																																
Rowlesburg ‖	do				.30	.21			.12	.08		.04			.23	.30	.30	T.	.10	.06		.22	.14	.06		.64							2.80
Saint Marys ‖	Ohio				.23				.06				T.		.36	.30	.16		T.			.15	.15			.24							1.66
Smithfield ‖	Fishing Creek				.30				.13	.09	.05		.09		.16	.25	.14		.13	T.		.17	.10	.05		.28							1.94
Terra Alta	Monongahela				.54	.06			.24		.16			.21	.23	.03	.16	.08	.16	.04		.39	.08	.08		.12	.38						2.76
Wellsburg	Ohio				.12				.09		T.		.02	.12	.13	.10	.03		T.			.19	.02	.29		.15	.05						1.31
Weston	Monongahela				.50					.10	.04			.15	.20	.15	.10	.04								.05	.60						1.93
Wheeling ‖	Ohio				.15	T.			.07	.01	T.		.02		.21	.15	.09	T.	.03	.01		.22	.05	.17		.23	T.						1.38
Southern Division.																																	
Bancroft ‖	Great Kanawha			.26					.05						.38	.21	.05					.10	.05			.60							1.70
Beckley	do																																
Bluefield	do				.30				.10	.09	.10	.10	.10	.25		.18	.20		.10	.10		.45	.20			.38	.10						2.75
Breading	do																																
Camden-on-Gauley ‖	do				.80				.19					.11	.20	.16		.25				T.	.11		2.00	T.						3.82
Charleston ‖	do				.40	T.			T.					.02	.32	.30	.10					.25	.30	.48		T.	.83						3.00
Clay ‖	do				.20				.10	T.	T.			.05	.20							.10		.12			.45						1.22
Cuba	Sand Creek				.35				.13	T.				.15	.15	T.	T.					.15	T	.15		.14	T.						1.22
Dam 19 O. R. ‖	Ohio				.25				.06				.02		.30	.14	.04	T.				.20	.12	.26			.22						1.61
Dam 20 O. R. ‖	do				.29	T.			.03				.05		.20	.16	.09		.05			.13	.06	.27		T.	.22						1.55
Dam 22 O. R. ‖	do				.38				.06						.25	.16	.04	.10				.12				.10	.05						1.26
Dam 26 O. R. ‖	do				.22					.04	T.			T.	.03	.11	.10	T.	T.			.02	.02	.02		T.	.25						0.81
Elkhorn	Big Sandy																																
Evans	Ohio				.34				.05					.18	.25	.19	T.	T.				.14		.27		.24							1.66
Garyl	Big Sandy				.11			.07	T.	.01	.02			.13		.02		.06		.40			.60			.90			.03				2.35
Green Sulpr. Spgs.	Great Kanawha				.45				.08	.16	.08			.52		27	.08		.08			.22	.45		1.23	.31						3.93
Hinton ‖	do				.38				.04		T.				.38	.04	.02		.06			.34		.14		.12	.64						2.46
Holcomb	do			*	.30				.11	*	.25			.10	*	*	.69	*	.17				.21			.45							2.34
Huntington ‖	Ohio				.16				.18		T.		T.	.12	.16	.16	.14					.10	.04	.04		.08	.34						1.52
Kanawha Falls ‖	Great Kanawha				T.	T.			T.	T.					T.	.33	T.					.20	T.	.15		T.							0.68
Kaylord ‖	do				.16	T.			.08	T.	.06	T.			.10	.18	.19	T.	.09			.13					.63						1.62
Lewisburg	do				.35				.20					.52		.04			.05			.25	.23			.71							2.35
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do				.27				.20	T.	T.			.60	.25	.05	T.		.20			.30	.42	.40		.72			T.				3.41
Point Pleasant ‖	Ohio				.29				.03					.17	.05							.11		.12			.32						1.09
Powellton	Great Kanawha				.04									.28	.10	.16						.30	.07	.22		.25							1.42
Raleigh	do				.38				.11		.07			.02	.36	.26	.13		.27			.30	.10			.62	.72						3.34
Renick	do				.40				.08							1.00						.03		.75			.70						2.96
Robertsburg ‖	do				.28				T.					T.	.32	.15	.05	T				.05		.10		T.	.25						1.20
Ryan	do				.28				.06	.02	T.	T.	.01	.11	.53	.16	.10		T.		T.	.08	.06	.08		.26	.15		T.				1.90
Sissonville ‖	do																																
Spencer ‖	Little Kanawha				.96				T.	T.	T.				.38	.40	.15					.14		T.			T.						2.03
Sutton	Great Kanawha				.32				.08		.08				.30	.10	.25	.08			.22		.10		.16	.40							2.09
Union	do				.50											.50							.60				1.50						3.10
White Sulphur Spgs.	do																																
Williamson ‖	Big Sandy				.18				T.	T.	T.			.25	T.	.10	T.		T.			.20	.10	.18		.25	.33						1.59

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for February, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	39	40	34	31	26	24	38	31	29	18	34	48	38	58	44	28	32	28	32	38	40	44	33	49	38	38	48	63				37.2
	Minimum	18	7	19	12	15	12	16	20	3	2	15	28	26	28	27	20	19	26	12	2	12	28	29	27	29	12	17	27				17.8
Brandywine	Maximum	50	46	53	55	48	45	45	40	38	29	40	58	51	60	50	50	43	43	40	47	56	54	50	54	53	47	50	61				48.4
	Minimum	17	9	23	35	19	10	12	22	17	19	6	28	26	37	35	27	22	19	15	13	28	37	34	22	31	24	16	26				22.5
Burlington	Maximum	38	42	50	52	44	38	43	38	32	32	40	54	35	53	44	39	38	38	36	45	42	45	44	50	43	45	53	63				43.4
	Minimum	26	13	21	31	26	16	18	25	20	21	10	27	26	34	37	30	29	26	20	23	13	33	36	31	30	24	17	22				24.5
Martinsburg§	Maximum	40	45	50	46	42	40	45	42	34	33	38	41	38	49	42	39	40	40	40	41	38	42	44	53	46	37	51	59				42.6
	Minimum	27	23	24	27	29	24	26	27	23	24	19	20	26	29	33	32	30	32	23	24	25	33	34	36	33	25	25	26				27.1
Moorfield	Maximum	47	48	55	58	53	45	47	43	38	33	47	62	56	58	54	43	44	43	43	49	53	46	49	56	53	45	58	69				49.8
	Minimum	25	14	23	31	24	18	18	25	22	23	10	27	27	33	37	31	28	30	20	16	32	32	36	29	31	24	18	30				25.5
Piedmont	Maximum	42	44	49	50	47	38	45	37	36	28	42	54	41	52	45	37	36	35	36	39	42	40	41	54	45	42	54	65				43.4
	Minimum	25	18	24	34	25	18	17	28	18	19	11	30	28	34	36	28	27	26	20	15	31	33	35	34	32	20	19	24				25.3
Romney	Maximum	49	45	54	54	53	46	47	45	40	32	54	60	47	57	50	39	41	42	41	38	48	50	53	55	56	57	56	68				49.2
	Minimum	25	18	22	33	23	20	18	25	20	22	10	24	26	34	35	29	28	29	20	16	32	35	34	33	35	32	19	21				25.6
Upper Tract	Maximum	47	46	50	56	55	40	41	45	35	35	41	46	50	50	47	40	40	41	40	50	55	48	45	52	50	40	42	50				45.5
	Minimum	15	12	24	29	27	14	14	15	18	17	11	15	27	26	26	27	25	20	16	15	20	33	34	30	28	23	23	25				21.7
Wardensville§	Maximum	56	55	50	42	40	41	46						56																			
	Minimum	14	19	32	24	21	16	18	22						36																		
Northern Division.																																	
Bens Run	Maximum	37	45	57	44	36	37	42	36	28	33	38	50	54	51	43	37	38	35	40	48	49	65	56	53	51	43	56	67				45.3
	Minimum	21	17	29	34	21	17	28	23	18	18	18	33	31	33		29	29	29	21	23	36	40	37	31	35	20	20	31				26.7
Buckhannon	Maximum	45	42	57	48	40	33	40	35	28	29	40	52	56	55	38	32	33	35	33	48	55	58	50	48	54	49	50	65				44.6
	Minimum	18	14	27	38	24	15	16	28	12	18	12	22	30	38	23	27	29	28	19	20	38	35	35	32	34	19	19	19				24.6
Creston	Maximum	46	44	56	50	42	36	42	39	33	37	40	54	58	58	41	35	39	39	41	44	56	64	62	54	54	51	57	62				47.6
	Minimum	20	15	29	40	20	14	15	32	19	20	16	29	31	40	33	30	29	30	20	22	37	37	38	27	34	26	18	28				26.8
Elkins	Maximum	33	46	56	47	31	32	39	32	26	22	39	51	53	55	36	29	35	31	30	46	51	50	45	53	51	32	52	62				41.6
	Minimum	16	10	25	30	20	14	13	22	10	9	5	31	30	35	29	23	22	24	17	12	33	35	32	30	32	16	17	29				22.2
Fairmont§	Maximum	37	45	62	46	38	38	42	35	33	29	39	53	56	53	38	32	35	32	37	52	50	59	39	52	54	36	53	70				44.5
	Minimum	19	15	24	27	21	16	16	18	15	19	11	14	30	33	33	28	28	27	23	20	21	38	36	34	34	19	19	21				23.5
Glenville	Maximum	47	50	63	53	43	41	50	43	34	35	45	60	61	58	41	39	40	42	45	48	60	67	60	59	58	51	61	70				50.9
	Minimum	15	11	24	40	20	13	12	30	15	20	13	32	29	37	32	26	28	30	18	17	35	36	37	26	30	20	16	25				24.5
Grafton	Maximum	43	44	59	49	43	36	42	37	30	28	40	54	57	55	41	34	36	34	36	48	53	59	53	53	57	51	55	62				46.0
	Minimum	17	12	22	36	19	15	14	27	10	18	7	32	29	38	31	27	27	27	20	17	36	34	35	33	30	19	18	25				24.1
Lost Creek	Maximum	40	46	61	52	42	38	45	38	30	29	41	45	58	57	40	33	37	35	39	46	54	61	56	54	58	51	57	68				46.8
	Minimum	14	10	21	38	18	11	12	28	10	17	9	28	30	38	32	27	27	28	15	16	35	35	35	30	29	18	15	25				23.2
Mannington	Maximum	43	41	58	46	41	37	40	36	29	28	37	51	54	55	40	34	36	34	36	46	49	60	58	51	54	51	50	67				45.1
	Minimum	16	11	23	34	21	13	14	29	14	19	9	32	28	35	32	28	28	28	23	17	35	38	36	32	30	19	17	25				24.5
Morgantown	Maximum																																
	Minimum																																
New Cumberland	Maximum	38	42	53	45	45	37	39	33	29	31	37	42	43	52	40	34	34	33	36	40	44	52	52	49	47	44	48	64				42.2
	Minimum	18	15	23	33	28	16	17	22	12	13	8	29	31	40	32	26	26	26	22	15	33	35	34	31	32	19	9	13				23.5
New Martinsville	Maximum	43	45	59	52	47	40	44	38	30	33	39	47	52	54	46	37	40	35	38	44	48	62	69	55	53	46	54	68				46.8
	Minimum	19	15	28	38	22	15	18	30	20	18	14	32	31	42	33	30	29	29	20	22	35	40	38	33	33	20	18	30				26.9
Parkersburg	Maximum	34	42	56	50	35	31	42	34	28	32	39	48	60	54	36	32	38	35	35	45	51	62	47	50	49	35	52	66				43.6
	Minimum	24	19	33	31	22	18	19	25	21	20	21	34	34	36	32	30	30	30	23	25	38	40	37	29	30	21	22	39				28.0
Parsons	Maximum	34	41	61	46	37	35	41	31	50	24	41	52	53	50	38	38	34	29	34	46	45	49	49	54	53	47	53	67				44.1
	Minimum	15	9	21	33	19	10	10	25	5	15	2	30	27	25	30	25	24	24	19	8	38	34	33	31	30	17	14	25				21.2
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum																																
	Minimum																																
Terra Alta	Maximum	37	44	57	46	40	31	37	30	30	22	35	47	43	54	37	28	27	28	28	36	40	42	42	47	47	46	46	61				39.6
	Minimum	17	10	28	36	18	14	15	24	0	12	4	27	28	34	27	20	19	20	13	4	30	33	28	27	35	11	15	26				20.5
Wellsburg	Maximum	40	38	53	48	37	34	38	35	29	28	39	42	45	51	44	36	35	34	37	41	46	56	54	50	46	44	49	65				42.6
	Minimum	16	11	21	33	21	12	15	26	11	18	8	31	30	36	33	26	28	29	24	15	34	24	36	32	28	18	18	24				23.5
Weston	Maximum	47	45	62	54	45	38	44	39	30	31	39	56	59	58	42	34	35	36	37	45	55	61	57	59	56	50	56	67				47.5
	Minimum	15	21	27	23	22	16	16	21	16	20	11	33	31	40	32	27	27	29	20	21	36	35	35	30	33	19	20	28				25.2
Wheeling§	Maximum	37	43	60	48	38	40	45	35	32	34	39	44	49	50	37	31	38	32	40	43	48	61	41	50	48	37	52	66				43.5
	Minimum	20	14	15	30	20	15	15	19	15	11	15	15	32	34	33	28	28	29	22	22	22	39	35	31	32	18	19	23				23.2
Southern Division.																																	
Beckley	Maximum																																
	Minimum																																
Bluefield	Maximum	48	45	55	48	46	39	49	44	31	31	39	50	54	59	41	42	40	36	44	40	53	51	48	59	54	47	55	61				46.7
	Minimum	26	16	25	39	25	17	19	29	24	15	13	30	35	43	28	26	22	25	29	23	29	30	26	32	41	18	21	36				26.5
Charleston	Maximum	57	54	63	58	55	53	50	49	50	49	43	56	63	59	57	56	51	45	45	50	62	62	51	56	54	50	60	72				54.6
	Minimum	22	24	20	34	24	27	19	17	18	10	12	23	30	30	34	25	27	29	23	22	27	37	29	30	30	22	20	20				24.7
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum	52	47	54	47	46	38	48	44	32	26	38	46	52	56	40	34	42	40	42	39	48	47	44	58	46	45	53	57				45.0
	Minimum	18	12	29	38	27	12	14	10	23	18	13	32	30	39	32	29	25	25	18	19	32	29	34	25	39	19	17	18				24.1
Hinton§	Maximum	44	47	55	49	38	40	47	37	33	30	40	50	52	57	36	33	43	37	42	44	48	42	41	55	41	37	54	60				44.0
	Minimum	22	17	17	33	29	18	19	19	27	20	17	20	31	34	33	30	27	26	23	22	24	32	32	28	28	21	29	22				24.7
Holcomb§	Maximum	42	54	60	47	34	38	47	31	30	25	40	55	50	57	32	31	41	29	39	44	48	46	56	60	49	35	53	62				44.2
	Minimum	16	11	13	34	23	12	13	15	13	14	8	14	29	35	30	22	18	23	17	15	32	33	30	25	26	17	17	22				20.6
Huntington§	Maximum	40	42	50	56	35	37	41	35	29	32	42	44	52	48	35	34	43	39	39	47	57	66	39	52	50	37	55	65				44.3
	Minimum	25	22	24	24	24	20	20	20	24	21	22	25	36	44	34	32	30	30	25	25	29	37	38	39	30	22	22	22				27.0
Lewisburg	Maximum	42	46	53	46	43	37	46	40	32	25	38	51	46	57	42	30	40	38	43	40	50	45	42	54	49	44	53	57				43.9
	Minimum	27	12	29	36	24	14	15	29	16	15	14	31	30	35	29	25	22	24	18	20	29	27	33	26	37	18	16	25				24.1
Marlinton	Maximum	34	42	18	44	34	32	40	34	28	22	34	48	42	52	34	28	30	26	40	38	42	38	38	50	40	38	46	52				38.4
	Minimum	12	6	22	34	24	10	8	24	10	14	6	30	24	34	26	22	22	18	12	14	26	28	30	22	30	16	12	18				19.8
Point Pleasant	Maximum	45	46	59	53	45	40	45	40	37	37	42	53	58	58	46	34	43	43	42	46	59	68	61	55	50	48	57	67				49.2
	Minimum	21	17	31	34	19	16	17	32	21	16	21	32	32	43	31	31	30	27	20	21	38	37	37	25	38	18	19	30				27.0
Powellton	Maximum	44	46	55	56	46	35	40	40	35	32	41	44	56	56	44	35	41	41	37	45	55	55	51	50	52	52	47	61				46.1
	Minimum	24	18	34	43	28	19	19	33	23	21	19	31	34	42	33	31	29	31	21	23	37	36	37	29	41	22	22	32				29.1
Robertsburg§	Maximum	40	37	57	52	47	40	45	34	39	31	55	55	65	49	35	34	34	38	41	49	60	67	41	59	52	41	59	68				47.3
	Minimum	21	17	16	33	19	15	15	15	13	19	19	29	29	40	32	31	30	30	20	20	27	35	37	27	29	21	19	23				24.3
Ryan	Maximum	41	44	56	52	38	37	44	36	33	30	40	55	61	55	39	33	39	36	39	47	58	61	50	53	52	48	56	67				46.4
	Minimum	16	13	29	38	17	11	13	13	17	17	15	25	30	36	31	29	28	26	17	22	37	48	36	25	34	17	16	26				24.4
Spencer§	Maximum	40	50	57	52	37	38	45	37	39	32	41	37	60	49	35	34	40	35	40	48	50	64	40	54	52	37	59	67				45.3
	Minimum	19	15	26	45	20	15	15	32	20	20	18	24	30	37	32	29	29	29	19	20	34	38	34	27	34	19	18	32				26.1
Sutton	Maximum	50	46	55	55	52	37	43	43	36	36	43	58	58	57	44	33	40	40	45	55	58	58	52	53	53	57	64	64				49.5
	Minimum	11	15	21	38	21	13	13	13	15	16	19	10	30	28	37	30	28	26	28	18	30	33	31	22	32	20	11	24	24			23.0
Union§	Maximum	57	58	64	50	47	39	45	44	40	39	37	51	53	62	60	35	40	40	44	44	52	49	50	57	62	47	54	69				49.3
	Minimum	21	12	27	35	25	13	15	30	20	15	12	30	29	34	29	25	22	24	17	21	32	27	26	25	30	19	17	29				23.9
White Sulphur Spgs.	Maximum																																
	Minimum																																
Williamson§	Maximum	49	48	61	54	36	43	47	38	30	31	43	56	65	52	37	35	48	44	17	50	60	68	42	61	53	40	61	64				48.7
	Minimum	25	20	26	30	23	20	20	21	25	20	18	19	30	40	34	30	29	29	22	22	27	37	37	32	32	22	22	24				26.3

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.
Based on 680 records.

T.03
NWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MARCH, 1919

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
APRIL 22, 1919

Departure of the Mean Temperature from the Normal, March, 1919.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXVII. PARKERSBURG, W. VA., MARCH, 1919. No. 3

GENERAL SUMMARY.

March was considerably warmer and drier than usual and free from periods of low temperature. Lower temperatures were recorded in every other March of record, except in 1897, 1903, and 1908. Exceptionally pleasant weather was the rule. The precipitation was favorably distributed throughout the month and over the State and was sufficient for all purposes The snowfall was unimportant, except in some of the more elevated localities. The conditions were exceptionally favorable for plowing and other farm work and at the close of the month early seeding was in progress. Wheat and rye were in excellent condition, with large acreages, and peach, plum, and cherry trees were nearly in full bud.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.20 and 30.19 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.53 inches on the 22d, and 29.55 inches on the 9th. Elkins, 30.49 inches on the 15th, and 29.56 inches on the 9th.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 44.5 . The departure from the normal for 40 stations having ten or more years of record was +1.7°. The temperatures were slightly below the normal on the 1st-2d, 6-7th, 10-12th, and considerably below on the last four days, with the lowest readings occurring generally on the 2d, 12th, and 29th. Abnormally warm weather prevailed on the 3d-5th, 13-17th, and 25-26th, with the highest temperatures on the 25th and 26th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 76 per cent; 8 p. m., 60 per cent. The March averages for the same hours for the past 30 years are 80 and 69 per cent, respectively. Elkins, 8 a. m., 84 per cent; 8 p. m., 63 per cent. The March averages for Elkins for the same hours for the past 19 years are 83 and 70 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 62 stations reporting, was 2.92 inches. The departure from the normal for 44 stations having ten or more years of record was — 0.85 inch. Most of the precipitation was recorded on the 1st, 5-6th, 9th, 11th, 14-15th, 17-19th, and 27-28th, with the heaviest rainfall on the 27th. Snow flurries or light snow fell in many localities on the 5-6th and 29th-31st and also in some of the more elevated localities on the 11th, 14th, and 27-28th.

WIND.

The average wind velocity at Parkersburg was 7.1 miles per hour, or 0.1 mile below the March average for the past 29 years. The average at Elkins was 7.0 miles per hour, or 1.4 miles above the March average for 20 years. The highest velocity at Parkersburg was 31 miles per hour from the southwest on the 17th, and at Elkins 35 miles per hour from the west on the 1st.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 49 per cent of the possible amount, or 9 per cent above the March average for 21 years. The average at Elkins was 52 per cent, or 14 per cent above the March average for 20 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, Glenville, Mannington, Marlinton, New Cumberland, and Smithfield, 21st; Elkins, 8th and 21st; Romney, 14th, 15th, 16th, and 17th; Wheeling, 1st, 2d, 3d, 8th, 13th, and 26th.

Hail: Dam No. 26 (Hogsett, W. Va.), 18th; Moorefield, 1st; Piedmont, 14th and 15th.

Halo, lunar: Elkins, 10th.

Sleet: Camden-on-Gauley, 30th; Grafton, 27th; Holcomb, 17th and 18th; Huntington, 18th; Parkersburg, 5th, 27th, and 30th; Piedmont, 15th; Smithfield, 5th and 27th; Terra Alta, 27th; Wardensville, 14th and 15th; Wheeling, 5th, 27th, and 30th.

Smoke light: Mannington and New Cumberland, 26th.

Thunderstorms (dates and number of stations reporting): 1st, 1; 5th, 1; 28th, 1; 30th, 1.

COMPARATIVE DATA FOR MARCH.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy	Cloudy.
1891	31.9	....	....	4.91	....	....	....	..	..	..
1892	36.4	87	8	3.50	....	....	....	..	..	..
1893	40.7	84	3	1.49	2.89	0.89	5.2	8	8	15
1894	45.8	88	1	1.94	3.05	0.74	1.9	15	9	7
1895	39.6	90	0	3.05	4.75	0.89	7.9	11	9	11
1896	36.1	76	−10	4.45	8.40	1.76	....	10	8	13
1897	46.1	81	12	3.60	6.52	1.33	....	9	10	12
1898	48.5	86	9	5.43	10.05	1.25	T.	8	9	14
1899	42.5	76	0	5.82	8.48	2.40	4.5	7	9	15
1900	38.5	78	− 5	3.79	6.48	2.18	14.7	7	9	15
1901	42.9	83	−11	3.23	5.27	0.90	2.3	8	8	15
1902	43.4	80	− 5	4.30	6.29	3.00	15.0	10	9	12
1903	51.3	87	13	4.47	6.59	2.70	0.2	10	9	12
1904	43.8	86	7	4.12	9.10	1.38	1.9	9	8	14
1905	46.6	88	− 2	4.10	6.46	1.45	0.7	14	7	10
1906	37.3	75	− 7	4.77	8.11	1.98	13.4	7	6	18
1907	49.6	94	2	4.77	8.18	1.05	4.2	12	8	11
1908	47.8	89	15	6.04	8.60	1.23	1.1	11	8	12
1909	40.8	83	10	3.38	8.66	1.10	4.7	9	10	12
1910	49.5	90	5	2.50	2.25	0.04	1.1	18	9	4
1911	40.5	90	− 5	3.30	7.86	1.12	5.2	11	8	12
1912	39.9	80	6	5.02	9.36	1.78	5.1	8	7	16
1913	45.7	89	− 3	4.53	7.90	1.77	2.7	11	9	11
1914	37.3	83	−13	3.03	7.11	0.89	17.7	10	8	13
1915	34.4	63	7	1.61	4.32	0.53	6.7	12	7	12
1916	38.5	88	− 4	4.88	9.88	2.49	9.0	11	7	13
1917	41.9	85	− 3	6.58	14.20	3.10	11.6	14	4	13
1918	46.5	85	9	4.26	9.37	1.55	0.1	16	5	10
1919	44.5	81	12	2.92	4.81	1.60	0.8	16	6	9
Means and extremes	42.5	94	−13	3.93	14.20	0.04	5.5	11	8	12

Climatological Data for March, 1919.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard††	Grant	2,700	18	39.9[d]	− 2.2	69[d]	17†	12[d]	23	48	.....	.....	.....	.....	.....	12[d]	5[d]	5[d]	w.	G. C. Dixon.
Brandywine	Pendleton	.....	3	44.6	.....	72	26	20	2†	45	2.49	.....	1.10	0	7	17	5	9	n.	Elmer Keister.
Burlington	Mineral	875	25	42.2	+ 1.0	74	26	22	2†	44	2.08	−1.02	0.99	T.	5	13	11	7	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	241	30	.....	.....	.....	.....	.....	.....	.....	2.48	−0.63	0.95	0	8	.....	.....	.....	e.	S. W. Lightner.
Martinsburg	Berkeley	435	27	43.8	+ 4.0	73	17	27	2†	35	3.31	+0.06	1.00	T.	9	21	4	6	nw.	G. W. Van Metre, C. E.
Moorefield [a]	Hardy	900	23	46.6	+ 3.1	79	26	21	12	44	2.41	−0.26	0.90	.....	8	25	0	5	.....	M. S. Henkel.
Piedmont	Mineral	919	6	43.0	.....	73	26	20	1	40	2.39	.....	0.79	0	9	17	11	3	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	21	45.1	+ 2.8	76	26	21	3	43	3.68	+0.59	1.00	T.	7	16	5	10	w.	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	20	44.6	+ 1.7	75	26	20	2†	45	2.25	−0.20	1.00	T.	6	23	1	7	w.	J. M. Mallow.
Wardensville	Hardy	1,200	1	43.6[e]	.....	75[e]	26	23[d]	12†	43[d]	2.60	.....	0.63	T.	10	17[d]	4[d]	6[d]	w.	Luther F. Sutton.
Averages and	extremes	.....	....	44.2	+ 2.5	79	26	12	23	45	2.63	−0.24	1.10	T.	8	19	5	7	w.	
Northern Division.																				
Bens Run	Pleasants	622	17	45.9	+ 3.1	76	16†	24	2†	42	2.58	−1.68	0.70	1.0	4	19	5	7	.....	J. D. Riggs.
Brandonville	Preston	1,809	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	22	44.4	+ 3.1	75	26	22	29	41	3.25	−1.24	1.40	0.5	4	16	7	8	.....	H. A. Darnall.
Cortland	Tucker	3,300	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	17	46.6	+ 3.0	75	16†	23	2†	41	3.09	−0.77	0.99	0.3	9	15	3	13	w.	J. M. Reed.
Davis	Tucker	3,093	10	.....	.....	.....	.....	.....	.....	.....	2.04	.....	0.55	2.5	9	13	5	13	.....	Ross C. Male.
Elizabeth	Wirt	646	7	.....	.....	.....	.....	.....	.....	.....	2.91	.....	0.72	.....	8	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	18	40.9	+ 1.8	72	26	20	23	45	2.76	−1.31	0.84	2.2	12	10	5	16	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	13	43.6	+ 2.2	76	16†	22	12	47	2.84	−1.14	0.67	3.0	14	22	3	6	w.	F. P. Hall.
Glenville	Gilmer	738	25	47.4	+ 3.5	80	25†	18	29	53	2.74	−1.41	0.67	1.0	10	19	6	6	w.	Howard R. Brannon.
Grafton	Taylor	1,000	26	44.6	+ 2.0	77	25	20	2	51	1.86	−2.21	0.68	T.	5	14	10	7	e.	W. C. Byers.
Lost Creek	Harrison	1,026	21	44.2	+ 1.7	75	26	19	12†	54	2.53	−1.58	0.70	1.0	6	16	4	11	sw.	Allen Smith.
Mannington	Marion	974	16	44.0	+ 1.2	74	26	20	12	46	3.06	−0.74	0.70	3.9	10	13	9	9	sw.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. W. Muldoon.
Moundsville	Marshall	642	16	.....	.....	.....	.....	.....	.....	.....	2.50	−0.98	0.65	3.3	6	17	8	6	sw.	M. Z. White.
New Cumberland	Hancock	987	21	40.9	+ 1.2	72	17	16	8	43	3.19	−0.22	1.19	2.7	11	14	11	6	nw.	M. F. Smith.
New Martinsville	Wetzel	634	25	46.8	+ 3.4	77	16†	23	6†	47	2.90	−0.85	0.80	T.	10	20	3	8	n.	Wm. Ankrom.
Parkersburg	Wood	638	32	44.6	+ 2.3	76	16	23	6	39	2.37	−1.45	0.80	0.4	11	13	5	13	nw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	19	41.6	0	76	25	17	12	52	1.60	−2.62	1.00	1.0	2	16	8	7	.....	J. W. Swisher.
Philippi	Barbour	1,149	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Attie G. Robinson.
Pickens	Randolph	2,697	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	32	.....	.....	.....	.....	.....	.....	.....	3.66	−0.59	0.80	3.0	10	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	10	.....	.....	.....	.....	.....	.....	.....	2.93	−0.80	0.68	T.	11	.....	.....	.....	nw.	Wm. Hughes.
Smithfield	Wetzel	835	13	40.6	− 1.1	75	25	18	29	50	2.65	−1.52	0.75	1.0	14	21	6	4	sw.	G. M. Whisler.
Terra Alta	Preston	2,612	18	39.2	+ 0.4	70	25†	15	6	44	3.30	−1.88	0.68	9.5	13	18	7	6	w.	Charles W. Gray.
Wellsburg	Brooke	1,225	18	42.8	+ 3.6	75	17	19	2	45	3.15	−0.20	0.76	.....	10	17	5	9	w.	George P. Pfister.
Weston	Lewis	1,026	23	46.2	+ 2.7	79	26	22	29	43	2.80	−1.63	0.90	T.	5	13	6	12	.....	Weston State Hospital.
Wheeling	Ohio	645	32	43.6	+ 1.9	78	25	21	6	48	3.25	+0.17	0.65	1.3	14	13	7	11	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	43.8	+ 2.0	80	25†	15	6	54	2.78	−1.17	1.40	1.8	9	16	6	9	w.	
Southern Division.																				
Bancroft	Putnam	574	15	46.8	+ 2.6	79	16	22	29	48	2.88	−0.99	0.85	0.5	10	17	2	12	nw.	R. E. Dent.
Beckley	Raleigh	2,440	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John A. Ewart.
Bluefield [a]	Mercer	2,558	24	45.6	+ 2.0	74	25	24	12†	38	3.01	−0.74	1.08	.....	9	17	8	5	.....	Norfolk & Western Ry.
Breading	Mingo	507	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	4	.....	.....	.....	.....	.....	.....	.....	2.74	.....	1.00	T.	5	20	0	11	n.	Miss Katie Jarvis.
Charleston	Kanawha	597	16	50.2	+ 2.5	80	16	25	12	41	3.52	−0.60	1.30	T.	9	12	0	19	se.	C. V. Lewis.
Clay	Clay	706	3	.....	.....	.....	.....	.....	.....	.....	1.95	.....	0.80	T.	6	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	17	46.6	+ 2.6	81	25	21	2†	51	3.24	−0.34	1.00	0.2	8	12	11	8	w.	Miss Faythe Howard.
Dam 19 O. R	Wood	557	3	.....	.....	.....	.....	.....	.....	.....	2.94	.....	0.80	T.	11	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R	Wood	551	3	.....	.....	.....	.....	.....	.....	.....	3.07	.....	0.84	T.	12	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R	Jackson	538	4	.....	.....	.....	.....	.....	.....	.....	2.04	.....	0.72	T.	7	.....	.....	.....	se.	U. S. Engineer Office.
Dam 26 O. R	Mason	505	3	.....	.....	.....	.....	.....	.....	.....	2.49	.....	0.70	.....	9	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans [a]	Jackson	606	7	47.2	.....	74	16	26	29	39	4.22	.....	0.90	0	8	18	3	9	.....	B. F. Sayre.
Gary	McDowell	1,426	3	.....	.....	.....	.....	.....	.....	.....	3.58	.....	0.95	T.	9	21	0	10	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	23	43.4	+ 0.5	69	26	19	12	41	4.81	+1.19	1.63	2.0	11	11	6	14	w.	W. H. Gwinn.
Hinton	..do	1,450	22	44.8	+ 0.7	72	25	23	12	41	2.80	−1.11	1.42	0	9	12	2	17	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	7	42.8	.....	75	25	20	12†	46	3.38	.....	1.09	1.5	11	14	8	9	.....	R. C. Ferguson.
Huntington	Cabell	538	25	44.8	+ 0.3	77	25	26	2	44	2.90	−1.38	0.72	1.4	10	16	1	14	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	0	.....	.....	.....	.....	.....	.....	.....	1.69	.....	0.60	.....	7	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	3	.....	.....	.....	.....	.....	.....	.....	3.14	.....	1.05	T.	14	.....	.....	.....	.....	CabinCreek Con.Coal Co.
Lewisburg	Greenbrier	2,200	19	44.0	+ 1.8	73	25	20	12	42	3.12	−0.86	1.50	T.	5	15	5	11	nw.	Geo. T. Argabate.
Logan	Logan	687	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	20	39.0	− 0.2	70	25	16	12	46	4.69	+0.81	1.80	T.	9	5	18	8	sw.	S. L. Brown.
Point Pleasant	Mason	553	26	47.1	+ 1.1	80	25	22	2	50	2.77	−1.33	0.73	T.	9	12	5	14	.....	W. D. Holmes.
Powellton	Fayette	933	23	46.6	+ 1.0	72	27	26	2†	37	2.88	−1.66	0.85	T.	10	15	10	6	w.	J. F. Campbell.
Raleigh	Raleigh	2,130	3	.....	.....	.....	.....	.....	.....	.....	3.63	.....	1.73	2.5	6	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	3	.....	.....	.....	.....	.....	.....	.....	3.12	.....	1.75	.....	5	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	19	45.2	+ 0.5	80	25	24	2†	50	2.70	−1.31	0.75	T.	9	13	3	15	n.	E. C. Brace, Jr.
Ryan	Roane	700	16	44.6	+ 0.7	77	25	17	3	49	2.88	−1.28	0.92	1.2	10	13	6	12	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	15	45.6	+ 3.5	77	16†	23	2†	47	3.15	−0.53	0.76	T.	9	8	14	9	.....	A. M. McKown.
Sutton	Braxton	839	13	46.2	+ 0.8	75	17†	20	3†	52	3.11	−0.60	0.92	T.	7	23	4	4	.....	C. B. Eakle.
Union	Monroe	2,250	15	43.8	+ 1.0	69	4	19	12	44	2.75	−0.76	1.00	0	4	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	9	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Ayres.
Williamson	Mingo	660	19	45.9	− 1.1	79	25	27	2†	49	4.29	−0.01	1.51	T.	11	14	9	8	w.	J. F. Keyser.
Averages and	extremes	.....	....	45.3	+ 1.2	81	25	16	12	52	3.12	−0.68	1.80	0.3	9	14	6	11	w.	
State averages and	extremes	.....	....	44.5	+ 1.7	81	25	12	23	54	2.92	−0.85	1.80	0.8	9	16	6	9	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

z Approximated by the observer.

Daily Precipitation for March, 1919.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac	.29				.31	.04			.39	T	.01				.01			.39									.16					†††
Brandywine	do	.33				*	.15			.68						.08					T.		.15					1.10					2.49
Burlington	do					.15				.60						.22			.21									.90			T.		2.08
Harpers Ferry ‖‖	do	.15					.50			.95						T.	.20	T.	.21		.05							.32	.10				2.48
Martinsburg	do	.25				.33				.98					.03	*	.30			*	.42							1.00				T.	3.31
Moorefield	do	.28				.24				.43						.09	.02		.37									.90			.08		2.41
Piedmont	do	.29				.21				.63		T.			.05	.18	.06		.16		.02							.79					2.39
Romney	do	1.00				.25				.75					T.		.36	.25			.07							1.00					3.68
Upper Tract	do	.25				.10				.50						.20				.20								1.00			T.	T.	2.25
Wardensville ‖‖	do	*					.55			.60	.20				.18	.03		.12		.25							.04	.63	T.		T.		2.60
Northern Division.																																	
Bens Run	Ohio					.61				.70									.59									.68					2.58
Brandonville ‖‖	Monongahela																																
Buckhannon	do	.60				.80				.45					T.				T.									1.40			T.	T.	3.25
Central Station	Middle Is. Creek																																
Cortland ‖‖	Monongahela																																
Creston ‖‖	Little Kanawha	.50				.20	.50			.65	T.	.10				.07			.08									.56	.43				3.09
Davis ‖	Monongahela	.28					.53				.08	.05			T.	.18			.55		T							.22	.05			.10	2.04
Elizabeth ‖‖	Little Kanawha	.30					.65			.72						.03			.24	.10								.55	.32				2.91
Elkins***	Monongahela	.14				.80	.01		T.	.28		.04			T.	.01	T.	.44	.10				T.					.84	.01		.05	.04	2.76
Fairmont ‖‖	do	.30				.09	.55	T.		.60	.02	.05	T.		.02	.02	.01		.28	.02								.07	.60		T.	.21	2.84
Glenville ‖‖	Little Kanawha	.32				.08	.57			.55		.10				.04			.06	.35								.36	.31			T.	2.74
Grafton	Monongahela					*	.68			.47		.11			T.		T.		T.									.60			T.		1.86
Lost Creek	do	.25				.60	.21			.44		T.			T.		T.		.33									.70			T.	T.	2.53
Mannington	do	.47				.47	.09			.68		.06			.06		.03		.30									.70			.20	T.	3.06
Morgantown	do																																
Moundsville ‖‖	Ohio					.55			.65									.35	.20									.45		.30			2.50
New Cumberland	do	.40				.43	.02		T.	1.19		.08			T.	.02	.49	.07	*									.44	T.	T.	.05		3.19
New Martinsville	do	.45				.55	.05			.80		.10			.05		.05		.15									.65			.05		2.90
Parkersburg ***	Ohio					.68			.65	.15		.03		T	.02	.01	.01	.20	.04								.01	.57			T	T.	2.37
Parsons	Monongahela									T										1.00								.60					1.60
Philippi	do																																
Pickens	do																																
Rowlesburg ‖‖	do	.48					.60			.40	.41	.15				.09			.35									.08	.72			.38	3.66
Saint Marys ‖‖	Ohio	.36				.35	.31			.68	.02	.03				T.	.05	T.	.25	.20								.25	.43			T.	2.93
Smithfield ‖‖	Fishing Creek	.20				.18	.18			.50	.05	.05			.07		.02	.01	.50	.01								.35	.40		T.	.04	2.65
Terra Alta	Monongahela	.43				.57	.11			.50	.02	.22			.05	T.	.01		.27									.68	.08		.32	.04	3.30
Wellsburg	Ohio	.47				.40	.09			.76		T.			.04	.05	.29		.28									.55			.22		3.15
Weston	Monongahela					.90	.15			.70									.35									.70					2.80
Wheeling ‖‖	Ohio	.41				.12	.45	T.		.65	.04	.06	T.		.05		.06	.17	.31									.22	.35		.02	.36	3.25
Southern Division.																																	
Bancroft ‖‖	Great Kanawha	.10				.48	.12			.85		.10				.03		T.	.16	.18								.58	.28				2.88
Beckley	do																																
Bluefield	do	.18				.30	.10								.50				.38									1.08	.02		.05	.40	3.01
Breading	do																																
Camden-on-Gauley ‖‖	do					1.00	T.					T.						.21	.33									1.00	T.		.20	T.	2.74
Charleston ‖‖	do	.25				.50	.50			.45		.25				T.			.20	.10								.85	.12			T.	3.52
Clay ‖‖	do					.60				.15									.30	.10								.40	.35		T.	T.	1.95
Cuba	Sand Creek	.30				.70	.02		T.	.15		T.			T.	1.00	T.	.12	.20									.75				T.	3.24
Dam 19 O. R. ‖‖	Ohio	.45				.35	.25			.80	.05					.04		.01	.15	.08								.40	.35			T.	2.94
Dam 20 O. R. ‖‖	do	.22				.42	.24			.84	.05	.05				.07	.05		.14	.20								.38	.38			T.	3.07
Dam 22 O. R. ‖‖	do									.72	.05					.12			.15	.15								.41	.41			T.	2.04
Dam 26 O. R. ‖‖	do	.55				.18	.35			.70		.05							.20	.06								.20	.20				2.49
Elkhorn	Big Sandy																																
Evans	Ohio	.44				.65				.70		.09			T.			.45	.10						.89			.90					4.22
Gary ‖‖	Big Sandy					.55									.40	.05	.12	.20										.95	.60		*	.68	3.58
Green Sulpr. Spgs.	Great Kanawha					.85	.20			.55		.22			.11	.25			.65									1.65	.10		.12	.10	4.81
Hinton ‖‖	do	.18				.06	.24			.44						.10			.20	T.								.70	.72			.16	2.80
Holcomb	do	.08				.77				.09		.07				T.		*	.40	.35								*	1.44		*	.18	3.38
Huntington ‖‖	Ohio	.34				.50	.20			.60		.06			T.	T.	T.		.28	.16								.50	.22			.04	2.90
Kanawha Falls ‖‖	Great Kanawha	*				.12	.60			.17						T.			.20	.20								.40				T.	1.69
Kaylord ‖‖	do	.15				.09	.78			.35	T.	.05	.03		T.	*	*	*	.32	.22								.62	.43			.12	3.14
Lewisburg	do					.62	T.			.53						.12			.35									1.50				T.	3.12
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do	.48				.48				.50	T.				.48	.10	.34	.40										1.80	T.		.05	T.	4.69
Point Pleasant ‖‖	Ohio	.38				.50	.10			.67		.04				.02		*	.25									.75				T.	2.77
Powellton	Great Kanawha	.18				.79	.10			.23		.08			.04			.03	.50									.85				.08	2.88
Raleigh ‖‖	do						.65			.28									.60									1.22	.51			.37	3.63
Renick ‖‖	do	.40							.50							.20			.27									1.75					3.12
Robertsburg ‖‖	do	.36				.34	.26			.65		.05							.17	.12								.45	.30				2.70
Ryan	do	.45				.54	.02		T.	.51		.08			.08			.16	.10									.92			T.	.02	2.88
Sissonville ‖‖	do																																
Spencer ‖‖	Little Kanawha	.76				.08	T.	.56		.56						.13			.14	.07								.28	.57				3.15
Sutton	Great Kanawha	.36				.62	.22			.22		.22							.55									.92				T.	3.11
Union	do						.80			.75									.20									1.00					2.75
White Sulphur Spgs.	do																																
Williamson ‖‖	Big Sandy	.16				.10	.85			.42		T.			.03	.17			.26	.08								1.20	.31			.71	4.29

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for March, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Division																																	
Bayard	Maximum	55	52	58	64	55	38	48	42	54	42	39	53	58	42	39	66	69	59	45	62	62	46	48	62	68	69	61					53.9
	Minimum	34	17	24	28	38	16	19	28	29	18	29	22	28	29	24	24	53	34	25	35	26	24	12	22	20	30	21					25 9
Brandywine	Maximum	55	60	61	68	63	60	58	55	58	57	61	61	56	45	50	56	67	63	60	60	69	67	63	62	70	72	65	56	47	50	48	59.5
	Minimum	34	20	25	30	41	25	26	26	36	30	20	27	29	34	30	34	50	40	31	38	27	26	22	22	25	35	34	28	26	27	26	29.8
Burlington	Maximum	58	52	57	69	58	41	51	59	52	55	45	57	60	42	35	56	70	59	54	62	59	54	58	62	66	74	65	37	47	47	41	54.9
	Minimum	32	22	28	30	35	25	24	25	28	33	33	23	27	30	29	34	34	43	36	40	25	33	22	27	25	34	33	23	27	25	30	29.5
Martinsburg§	Maximum	48	53	58	69	52	43	52	48	58	54	47	59	63	35	39	45	73	56	58	63	67	56	62	64	65	69	62	39	47	52	46	54.9
	Minimum	28	27	28	35	38	27	28	31	35	36	31	30	30	33	29	30	38	45	35	36	38	38	32	35	31	35	40	31	31	27	29	32.8
Moorfield	Maximum	63	57	63	76	72	56	57	54	58	57	56	65	65	62	40	51	73	69	56	63	71	65	62	66	72	79	75	41	52	51		61.6
	Minimum	36	23	28	34	39	26	24	27	36	34	38	21	27	34	31	36	40	42	32	40	29	29	23	26	37	35	40	30	29	25		31.6
Piedmont	Maximum	60	54	58	71	63	45	48	46	51	54	51	59	62	57	33	41	71	67	54	63	70	60	57	64	66	73	68	34	45	46	39	55.8
	Minimum	20	22	32	33	34	23	29	25	35	33	25	24	30	29	27	32	40	41	32	40	32	37	28	30	27	35	31	28	26	27	29	30.2
Romney	Maximum	60	65	62	75	73	65	56	56	57	56	56	62	62	62	35	46	73	68	56	65	72	60	67	67	69	76	69	39	35	38	40	59.4
	Minimum	25	22	21	34	36	24	26	26	35	34	37	25	28	32	28	33	40	42	32	40	31	35	27	26	29	34	35	30	30	32	29	30.8
Upper Tract	Maximum	50	56	62	70	69	66	60	53	54	60	60	60	62	60	58	60	60	63	65	59	59	68	59	63	72	75	65	58	57	48	46	60.5
	Minimum	34	20	20	26	24	23	23	23	34	31	28	24	29	27	29	35	34	33	33	39	29	29	21	25	27	37	35	31	31	27	27	28.6
Wardensville§	Maximum	60	61	68	67	60	68	52	46	61		61	48	36	39	60	70	54	53	62					67	69	75	57	46	47	48	40	56.8
	Minimum	30	25	26	36	34	25	26	28	33	36		23	35	28	30	39	44	35	37	30				24	27	35	24	29	30	30	23	30.4
Northern Division.																																	
Bens Run	Maximum	61	50	62	69	54	39	48	60	58	51	53	55	64	62	60	76	72	58	56	71	64	53	57	66	75	76	68	44	51	45	38	58.6
	Minimum	25	24	32	34	29	24	31	29	36	30	28	26	30	41	42	54	57	42	33	53	39	54	27	28	33	36	34	30	26	31	31	33.2
Buckhannon	Maximum	50	54	56	66	57	35	45	60	57	46	43	43	61	61	65	72	74	62	45	60	64	50	50	57	70	75	65	55	45	40	44	55.7
	Minimum	27	23	30	30	35	25	29	27	35	29	33	25	28	42	46	56	52	42	33	53	35	34	24	25	29	38	55	28	22	28	28	33.1
Creston	Maximum	62	57	61	71	65	42	48	59	55	50	47	61	66	63	61	75	71	61	56	69	70	60	60	62	70	75	71	41	53	49	45	59.9
	Minimum	27	23	28	30	33	26	35	27	38	28	35	23	28	43	46	54	60	41	32	31	37	38	25	27	31	40	35	30	23	32	32	33.4
Elkins	Maximum	45	54	57	66	59	39	42	53	55	48	38	53	58	53	55	64	69	53	45	59	61	45	47	55	72	72	60	33	43	39	33	52.5
	Minimum	25	21	28	30	26	22	28	25	33	29	27	21	25	39	39	51	49	36	31	32	32	30	20	23	27	36	27	24	24	27	22	29.3
Fairmont§	Maximum	40	55	61	69	56	37	46	64	54	52	45	54	61	56	62	76	75	51	55	65	65	53	57	62	75	76	63	38	48	38	37	56.0
	Minimum	26	24	32	32	34	23	24	28	30	29	30	22	26	33	38	44	54	41	32	33	38	33	24	26	28	32	43	28	23	30	30	31.3
Glenville	Maximum	61	57	65	73	71	43	54	69	59	55	50	62	67	67	67	77	76	63	58	72	70	68	56	65	80	80	75	60	53	51	47	63.7
	Minimum	22	21	26	28	35	25	30	24	37	26	35	20	25	42	41	51	54	41	29	30	37	37	20	23	27	36	34	30	18	29	30	31.1
Grafton	Maximum	60	55	60	71	65	40	47	60	58	53	47	58	64	59	61	73	71	63	53	64	64	60	56	61	77	72	76	51	49	46	42	59.2
	Minimum	26	20	29	29	33	22	27	24	36	28	34	21	24	39	37	54	51	40	31	35	35	22	21	24	26	36	31	25	21	23	29	30.1
Lost Creek	Maximum	58	56	61	65	56	40	46	62	56	52	47	57	64	60	61	71	72	61	55	64	62	59	55	62	73	75	72	43	50	47	39	58.1
	Minimum	26	20	27	28	32	23	28	25	36	27	33	19	24	42	41	55	54	41	30	31	34	34	19	19	19	35	33	29	20	23	29	30.2
Mannington	Maximum	63	53	58	69	66	36	43	59	55	50	49	54	61	58	62	73	73	62	52	64	63	59	55	58	72	74	71	38	48	45	38	57.5
	Minimum	24	21	29	30	32	23	29	25	36	28	35	20	24	39	39	47	50	41	32	32	35	32	22	24	26	34	33	28	21	24	29	30.5
Morgantown	Maximum																																
	Minimum																																
New Cumberland	Maximum	62	48	68	66	63	34	41	49	46	50	44	55	60	59	50	62	72	56	52	68	61	49	56	60	70	70	63	34	47	40	40	54.7
	Minimum	27	18	25	29	26	19	18	16	24	23	31	17	28	24	33	43	52	38	24	34	30	32	28	27	33	39	29	19	23	22	22	27.1
New Martinsville	Maximum	63	52	62	70	67	40	48	61	58	54	47	58	62	62	60	77	73	62	49	66	60	59	65	67	77	77	71	40	50	48	44	60.3
	Minimum	25	25	33	35	34	23	31	29	38	31	36	24	28	38	43	56	60	42	31	39	34	26	28	29	30	39	34	29	23	29	31	33.3
Parkersburg	Maximum	59	46	56	70	60	36	45	57	51	50	44	56	64	59	60	76	70	50	53	64	60	49	54	59	74	74	60	40	49	44	37	55.0
	Minimum	24	24	33	38	29	23	29	30	37	30	32	27	32	45	46	51	50	41	34	33	41	34	28	31	35	47	35	29	28	35	28	34.3
Parsons	Maximum	45	46	63	69	56	40	45	58	40	50	40	55	60	41	55	69	71	60	50	65	67	49	52	60	75	76	67	52	40	48	58	55.5
	Minimum	23	23	26	26	30	21	27	21	31	28	22	17	21	35	56	49	60	38	31	23	19	26	18	20	23	32	35	33	18	20	18	27.8
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum																																
	Minimum																																
Terra Alta	Maximum	55	53	56	63	58	38	38	48	50	46	41	50	54	52	34	64	69	63	45	58	61	50	48	55	70	70	66	26	39	36	35	51.3
	Minimum	21	21	29	33	36	15	27	25	30	25	29	22	29	26	25	32	48	34	24	34	32	28	17	24	26	36	26	20	20	20	22	27.0
Wellsburg	Maximum	63	58	58	68	64	34	43	52	50	49	45	54	58	55	53	66	75	61	60	67	66	59	56	60	70	71	65	35	45	43	43	56.3
	Minimum	26	19	25	28	29	22	21	21	35	29	34	21	27	35	36	46	51	42	25	36	33	29	20	24	25	33	31	28	29	23	28	29.4
Weston	Maximum	61	58	62	70	67	59	50	63	57	51	49	57	63	61	63	72	73	61	54	64	68	62	54	61	75	79	72	42	47	47	40	59.4
	Minimum	27	23	29	33	38	23	29	28	36	30	33	24	28	42	42	55	60	41	32	34	36	35	24	27	32	39	36	30	22	29	30	33.0
Wheeling§	Maximum	39	54	62	72	52	40	49	54	56	55	42	61	63	58	56	73	75	50	60	72	68	56	63	67	78	71	45	40	50	45	38	56.7
	Minimum	25	22	22	30	36	21	22	25	27	29	32	24	25	31	38	41	55	40	29	30	37	32	27	28	30	33	42	29	26	27	29	30.5
Southern Division.																																	
Beckley	Maximum																																
	Minimum																																
Bluefield	Maximum	54	50	60	67	64	51	52	50		53	48	59	63	59	52	62	66	63	51	63	67	65	57	65	74	70	61	41	48	60	44	58.0
	Minimum	27	35	31	38	47	25	32	32		28	31	24	36	44	53	38	56	32	32	32	31	37	26	27	37	52	50	24	25	30	26	33.3
Charleston	Maximum	60	64	63	64	62	64	62	60	59	59	56	60	71	66	77	80	75	68	64	69	69	65	64	65	76	79	75	69	65	61	57	65.9
	Minimum	27	25	29	30	32	28	28	30	29	32	38	25	32	42	47	50	62	45	35	32	40	38	30	28	30	38	45	32	26	29	32	34.4
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum	52	58	61	68	57	48	47	50	48	49	45	50	56	62	52	64	68	65	57	66	68	66	54	64	68	69	63	42	39	38	38	55.7
	Minimum	23	26	27	30	34	28	27	27	26	29	31	19	29	32	37	41	59	45	36	29	35	37	26	25	27	39	38	28	27	29	25	31.0
Hinton§	Maximum	48	58	59	69	55	49	53	53	57	51	47	60	62	60	49	67	70	51	52	66	67	49	54	64	72	71	56	44	51	63	37	56.8
	Minimum	30	26	28	32	32	28	29	30	34	30	30	23	24	31	36	37	48	43	37	37	37	38	30	29	31	35	47	29	29	31	36	32.7
Holcomb§	Maximum	60	59	61	69	57	42	46	56	50	52	44	59	62	60	60	67	70	45	48	62	64	51	56	63	70	74	52	39	55	40	31	55.7
	Minimum	25	28	23	28	33	24	25	26	34	26	28	20	26	30	40	45	42	38	31	28	31	36	20	22	29	36	48	25	20	32	28	29.8
Huntington§	Maximum	37	48	57	68	50	35	46	55	45	51	49	58	65	60	72	76	67	45	55	63	66	53	55	62	77	75	45	42	57	63	34	55.7
	Minimum	27	26	29	30	35	28	28	32	35	30	30	27	28	35	45	52	58	42	36	34	36	38	30	32	38	35	42	30	27	32	33	34.0
Lewisburg	Maximum	53	57	60	67	59	52	51	50	52	54	46	58	68	56	46	60	66	62	54	66	66	59	56	64	73	70	61	40	47	59	49	57.3
	Minimum	27	24	27	29	33	26	25	28	30	28	31	20	26	39	32	37	53	38	35	29	31	37	24	25	31	39	36	25	27	35	29	30.6
Marlinton	Maximum	46	52	54	62	48	44	46	48	44	46	48	52	56	52	44	42	60	48	46	66	62	52	54	58	70	66	52	34	40	52	38	50.8
	Minimum	32	18	22	24	38	28	26	28	32	26	24	16	22	28	32	34	38	38	36	28	28	22	24	20	24	30	26	22	24	34	24	27.2
Point Pleasant	Maximum	64	51	62	72	67	38	48	53	49	53	51	60	69	65	65	75	70	59	59	66	67	57	57	63	80	77	71	48	58	56	45	60.7
	Minimum	25	22	30	33	31	26	30	29	37	27	35	25	31	44	48	54	56	40	31	30	39	36	25	28	30	43	36	28	25	34	32	33.5
Powellton	Maximum	62	55	55	64	65	40	45	55	56	54	52	53	60	61	60	65	66	67	51	60	66	64	49	58	67	71	72	43	50	55	55	58.0
	Minimum	29	26	30	35	39	29	35	30	40	29	37	26	30	45	45	51	60	40	38	31	38	39	27	27	31	46	35	30	26	34	31	35.3
Robertsburg§	Maximum	44	59	65	73	59	41	50	59	49	55	58	65	68	65	69	79	69	49	51	64	64	58	56	65	80	77	45	45	47	55	37	58.1
	Minimum	27	24	25	29	30	27	27	29	32	28	29	20	31	34	40	54	58	43	30	30	34	37	27	27	30	35	44	29	24	29	32	32.3
Ryan	Maximum	62	52	60	70	52	30	45	57	56	51	46	57	64	65	60	76	71	59	55	64	67	55	55	62	77	76	70	42	52	51	43	58.3
	Minimum	26	21	17	25	32	25	32	25	37	25	35	20	26	40	47	53	53	40	30	28	35	28	22	23	28	38	35	29	20	29	30	30.8
Spencer§	Maximum	46	52	62	72	55	50	47	60	42	50	60	52	66	64	62	77	72	49	54	65	65	52	55	62	77	77	54	45	62	50	38	57.8
	Minimum	26	23	28	39	40	29	34	28	36	24	24	25	30	40	45	49	57	44	32	30	31	36	25	26	30	45	45	29	23	40	21	33.3
Sutton	Maximum	63	58	60	70	70	45	46	58	58	52	52	58	62	62	63	67	75	70	57	67	68	58	62	73	75	75	42	52	52	45	60.9	
	Minimum	22	21	20	28	38	25	29	26	35	27	35	20	46	40	41	53	55	41	35	30	35	37	22	22	21	35	33	27	20	27	30	31.4
Union §	Maximum	60	60	60	69	46	40	54	54	52	56	49	58	65	66	67	66	66	64	53	57	60	57	50	60	62	63	60	54	55	60	63	58.3
	Minimum	28	29	28	25	30	25	26	29	28	21	30	19	27	40	41	40	35	37	35	34	35	30	24	25	25	26	32	24	25	30	29	29.3
White Sulphur Spgs.	Maximum																																
	Minimum																																
Williamson§	Maximum	44	54	62	75	56	38	51	60	53	52	52	64	68	57	75	78	71	52	58	60	68	49	56	58	79	74	46	49	56	64	36	58.6
	Minimum	28	27	29	29	33	29	29	30	30	30	30	27	27	34	48	50	61	43	38	31	32	39	30	29	30	35	46	30	28	30	35	33.2

§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.
Based on 680 records.
M G.

+WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

APRIL, 1919

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MAY 24, 1919

Departure of the Mean Temperature from the Normal, April, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

A.T.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVII. PARKERSBURG, W. VA., APRIL, 1919. No. 4

GENERAL SUMMARY.

While April was dry, there was ample moisture for vegetation, as showers were frequent and well distributed. There were no damaging storms. The temperature averaged practically normal. After the first three days the conditions were generally excellent for farm work and growth until the middle of the last decade, when freezing temperatures and heavy to killing frosts were general. Owing to dry conditions, however, no great damage resulted, except to peach, plum, and cherry bloom, which was killed in some sections. At the close of the month oats were mostly seeded, potatoes were being planted, and the ground was being prepared for corn. The outlook for wheat and rye was excellent.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.05 and 30.06 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.44 inches on the 19th, and 29.54 inches on the 16th. Elkins, 30.45 inches on the 19th, and 29.54 inches on the 16th.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 51.8°. The departure from the normal for 39 stations having ten or more years of record was —0.1°. The month opened with the temperature about 20° below the normal and seasonally cool weather also prevailed from the 17th to the 20th and the 24th to the 28th, with the lowest temperatures occurring generally on the 2d. Abnormally warm weather prevailed from the 7th to the 11th, on the 15th, and from the 22d to the 24th, with the highest temperatures occurring generally on the 9th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 74 per cent; 8 p. m., 55 per cent. The April averages for the same hours for the past 30 years are 75 and 63 per cent, respectively. Elkins, 8 a. m., 78 per cent; 8 p. m., 60 per cent. The April averages for Elkins for the same hours for the past 19 years are 80 and 64 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 64 stations reporting, was 2.44 inches. The departure from the normal for 44 stations having ten or more years of record was —1.12 inches. While there were showers in many sections on about sixteen days, the greater part of the rainfall was received on the 8th, 11th, 16-18th, 23d-24th, and 29-30th. The greatest 24-hour amounts were generally recorded on the 11th. Light snow or snow flurries occurred in sections on the 1st, 5th, 11th, 17th, 18th, and 24th, but the amounts were unimportant, except at a few of the more elevated stations.

WIND.

The average wind velocity at Parkersburg was 6.2 miles per hour, or 0.5 mile below the April average for the past 30 years. The average at Elkins was 5.3 miles per hour, or 0.3 mile above the April average for 19 years. The highest velocity at Parkersburg was 30 miles per hour from the northwest on the 23d, and at Elkins 27 miles per hour from the west on the 16th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 44 per cent of the possible amount, or 4 per cent below the April average for 21 years. The average at Elkins was 42 per cent, or 2 per cent below the April average for 20 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 5th and 7th; Elkins, 6th, 9th, and 10th; Fairmont, 9th; Grafton, 19th; Hinton, 6th and 9th; Mannington, 9th; Marlinton, 6th, 7th, and 9th; New Cumberland, 9th, 14th, and 19th; Robertsburg, 19th; Rowlesburg, 6th, 14th, and 19th; Smithfield, 4th, 5th, 6th, 9th, and 21st; St. Marys, 5th, 9th, and 19th; Terra Alta, 15th; Wheeling, 3d, 7th, 9th, 14th, 19th, and 22d; Williamson, 4th, 6th, and 19th.

Hail: Creston and Terra Alta, 23d; Marlinton, 24th.

Halos, lunar: Elkins, 13th; Parkersburg, 10th.

Halo, solar: Elkins, 3d.

Thunderstorms (dates and number of stations reporting): 7th, 2; 9th, 1; 10th, 2; 14th, 2; 15th, 7; 16th, 4; 20th, 1; 23d, 12; 24th, 11.

Killing frosts or freezing temperatures were general on the mornings of the 25th, 26th, and 27th.

COMPARATIVE DATA FOR APRIL.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	52.0	.....	.....	2.81	....	....	...	..	..	..
1892	50.6	87	17	4.28	....	....	....	..	..	..
1893	53.4	92	20	5.18	8.98	2.91	0.8	8	8	14
1894	50.6	90	14	3.32	5.30	1.97	1.6	12	8	10
1895	52.9	90	17	2.93	5.47	0.90	....	11	9	10
1896	57.7	95	12	2.06	4.35	0.82	....	13	12	5
1897	51.5	90	19	2.97	7.10	1.58	....	11	10	9
1898	48.0	86	2	3.14	4.86	1.40	....	10	9	11
1899	53.4	93	18	1.84	3.17	0.92	0.5	13	9	8
1900	51.8	88	16	1.35	2.08	0.43	T.	14	7	9
1901	47.5	95	18	7.05	10.70	4.95	6.0	10	4	16
1902	49.8	96	21	3.06	4.57	1.53	10.0	10	10	10
1903	51.3	91	8	4.47	7.30	2.29	0.4	11	8	11
1904	47.7	82	12	3.15	5.71	1.12	1.3	9	9	12
1905	52.2	89	14	2.78	5.57	1.10	1.5	11	9	10
1906	54.1	92	15	3.16	6.59	0.57	0.3	15	8	7
1907	45.6	92	10	3.49	6.66	1.42	6.1	8	8	14
1908	54.8	92	18	4.30	8.02	0.77	0.3	13	8	9
1909	53.0	93	10	5.04	8.57	1.70	2.4	10	11	9
1910	53.2	91	16	3.39	9.07	1.63	0.6	10	8	12
1911	49.5	88	6	4.29	7.00	0.83	1.5	9	8	13
1912	55.4	88	20	4.03	8.00	1.09	0.2	11	10	9
1913	52.4	92	12	2.99	5.48	1.61	0.1	14	6	10
1914	52.1	93	16	4.63	10.05	1.29	0.2	10	9	11
1915	55.5	101	10	1.93	5.69	0.10	T.	15	8	7
1916	50.5	90	17	3.07	5.70	1.25	4.3	9	7	14
1917	51.7	90	10	2.99	5.31	1.29	1.8	13	8	9
1918	50.3	85	18	5.11	9.14	1.88	10.4	9	7	14
1919	51.8	90	10	2.44	4.21	1.03	0.2	12	8	10
Means and extremes	51.7	101	2	3.49	10.70	0.10	2.2	11	8	11

Climatological Data for April, 1919.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	18	45.2	− 1.7	79	9	10	2	44	1.03	−3.04	0.29	5.0	8	10	9	11	w.	G. C. Dixon.
Brandywine	Pendleton		3	51.9		82	9	14	2	45	1.87		0.62	0	8	22	1	7	s.	Elmer Keister.
Burlington	Mineral	875	25	49.9	− 0.9	81	7	22	2	44	1.70	−0.93	0.99	0	4	8	18	4	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	30								2.94	+0.03	0.95	0	5				e.	S. W. Lightner.
Martinsburg	Berkeley	435	27	51.4	− 0.1	82	9	22	2	42	1.85	−1.11	0.95	0	7	17	6	7	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	23	54.4	+ 2.3	88	9	18	2	49	1.85	−0.96	0.72	T.	4	27	1	2		M. S. Henkel.
Piedmont	Mineral	919	6	50.4		83	8	19	2	44	1.81		0.51	T.	9	13[a]	9[a]	7[a]	se.	C. A. Suter, Jr.
Romney [c]	Hampshire	824	21	54.6		87	9			46	2.00	−0.65	0.75	T.	4	5	14	8		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	20	51.5	+ 0.2	85	9	16	1	45	1.70	−0.64	0.70	0	5	21	2	7	w.	J. M. Mallow.
Wardensville	Hardy	1,200	1	49.6[j]		79[j]	8	20[i]	2	41°	1.56		0.62	T.		14[i]	1[i]	5[i]	w.	Luther F. Sutton.
Averages and	extremes			51.0	0	88	9	10	2	49	1.83	−1.04	0.95	0.5	6	16	7	7	w.	
Northern Division.																				
Bens Run	Pleasants	622	17	52.7	+ 0.4	86	9	19	2	41	3.04	−0.96	0.61	0	10	16	7	7		J. D. Riggs.
Brandonville	Preston	1,809	8								3.09		0.76	T.	8					W. H. Miller.
Buckhannon	Upshur	1,411	22	51.8	+ 0.8	82	9	15	2	41	2.62	−1.73	0.80	0	5	12	8	10		H. A. Darnall.
Cortland	Tucker	3,300	3								1.45		0.47		4					Samuel Harmon.
Creston	Wirt	701	17	55.0	+ 2.1	89	9	16	2	44	2.35	−1.60	0.71	0	10	12	1	17	sw.	J. M. Reed.
Davis	Tucker	3,093	10								2.46		0.88	2.5	9	10	3	17		Ross C. Male.
Elizabeth	Wirt	646	7								2.29		0.74	0	9					E. D. Ball.
Elkins	Randolph	1,947	18	48.4	− 0.3	80	9	16	2	43	1.94	−1.35	0.57	0.4	13	2	8	20	w.	U. S. Weather Bureau.
Fairmont	Marion	883	13	50.6	− 1.6	87	9	16	2	46	1.90	−1.61	0.57	T.	11	15	1	14	w.	F. P. Hall.
Glenville	Gilmer	738	25	54.8	+ 1.7	89	9[f]	13	2	46	1.81	−1.92	0.72	T.	7	15	8	7	w.	Howard R. Brannon.
Grafton [b]	Taylor	1,000	26	51.6	0	88	9	14	2	47	2.46	−1.28	0.82	T.	10	9	10	9	e.	W. C. Byers.
Lost Creek	Harrison	1,026	21	50.6	+ 0.6	82	9†	12	2	44	2.06	−1.37	0.81	T.	6	11	6	13	w.	Allen Smith.
Mannington	Marion	974	16	50.6	− 0.8	81	9†	14	2	44	2.39	−1.65	0.65	0.1	12	7	7	16	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	26																	R. W. Muldoon.
Moundsville	Marshall	642	16								2.97	−0.14	0.50	0	10	12	8	10		M. Z. White.
New Cumberland	Hancock	987	21	49.4	0	81	9	16	2	45	2.67	−0.86	0.75	T.	11	3	19	8	sw.	M. F. Smith.
New Martinsville	Wetzel	634	25	53.0	− 0.2	86	9	15	2	40	2.18	−1.37	0.60	T.	8	18	4	8	n.	Wm. Ankrom.
Parkersburg	Wood	638	32	52.9	0	84	9	21	2	35	2.09	−0.82	0.60	T.	11	7	8	15	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	19																	J. W. Swisher.
Philippi	Barbour	1,149	22																	Attic G. Robinson.
Pickens [a]	Randolph	2,697	16	48.9	+ 0.4	83	9	14	1	43	1.92	−3.16	0.60	3.0	8	10	7	12	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	32								2.17	−1.85	0.56		8					J. F. Pierce.
Saint Marys	Pleasants	577	10								3.16	−0.43	0.62	0	11				sw.	Wm. Hughes.
Smithfield	Wetzel	835	13	47.9	− 3.8	83	9	13	2	42	2.36	−1.46	0.45	0.5	14	17	7	6	sw.	G. M. Whisler.
Terra Alta	Preston	2,612	18	46.2	0	78	9	10	2	42	2.61	−1.36	0.66	2.0	13	11	13	6	w.	Charles W. Gray.
Wellsburg	Brooke	1,225	18	50.9	+ 2.1	81	9	16	2	46	2.39	−0.80	0.50	T.	12	13	10	7	w.	George P. Pfister.
Weston	Lewis	1,026	23	53.1	+ 0.5	85	9	15	2	41	2.25	−1.82	0.65	0	7	4	17	9		Weston State Hospital.
Wheeling	Ohio	615	32	50.2	− 2.5	86	9	11	2†	47	1.78	−1.33	0.33	0.2	14	8	9	13	sw.	Miss M. B. Forsyth.
Averages and	extremes			51.0	0	89	9†	8	2	47	2.33	1.37	1.00	0.4	10	11	8	11	w.	
Southern Division.																				
Bancroft	Putnam	574	15	54.4	+ 0.8	87	9	20	1†	45	3.20	−0.63	0.71	0	11	19	0	11	sw.	R. E. Dent.
Beckley	Raleigh	2,440	19																	John A. Ewart.
Bluefield [a]	Mercer	2,558	24	52.4	− 1.2	81	9	18	1	40	3.24	−0.17	0.68	0	11	10	11	8		Norfolk & Western Ry.
Breading	Mingo	507	2																	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	1								4.21		1.00	T.	8	11	4	15	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	16	58.0	+ 1.2	90	9	23	1†	45	3.07	−0.54	0.90	0	7	14	0	16	e.	C. V. Lewis.
Clay	Clay	706	3								2.80		0.70	0	8					Prof. E. H. Knabenshue.
Cuba	Jackson	650	17	54.7	+ 2.0	90	9†	15	2	50	2.27	−0.97	0.50	0	9	7	20	3	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	3								1.81		0.30	0	11					Lockmaster.
Dam 20 O. R.	Wood	551	3								2.06		0.53	0	12					Lockmaster.
Dam 22 O. R.	Jackson	538	4								2.02		0.57	0	10					U. S. Engineer Office.
Dam 26 O. R.	Mason	505	3								2.98		0.85	0	10					U. S. Engineer Office.
Elkhorn	McDowell	1,933	26																	L. L. Lincoln.
Evans	Jackson	606	7	54.6		82	9	22	2	54	2.92		0.72	0	9	13	3	14		B. F. Sayre.
Gary	McDowell	1,426	3								2.85		0.45	0	11					U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	23	50.3	− 0.7	80	9	20	1†	42	2.33	−0.89	0.54	T.	7	14	4	12	w.	W. H. Gwinn.
Hinton	do	1,450	22	51.7	1.6	83	9†	22	1†	44	2.32	−1.44	0.68	T.	11	10	1	19	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	7	49.2		85	9	12	2	47	3.10		0.79	0.5	15	10	8	12		R. C. Ferguson.
Huntington	Cabell	538	25	54.2	+ 0.2	88	9	25	2	44	2.70	−0.97	0.60	T.	9	11	4	15	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	0								2.17		0.50	0	7					J. O. Brown.
Kayford	Kanawha	1,335	3								3.04		0.59	0	12					Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	19	50.8	+ 0.7	83	9	18	1†	42	2.51	−0.67	0.77	0	9	10	12	8	nw.	Geo. T. Argabate.
Logan	Logan	687	16																	Agent C. & O. Ry.
Madison	Boone	704	13																	S. E. Bradley.
Marlinton	Pocahontas	2,131	20	46.0	− 1.4	76	9	16	1†	40	3.11	0	1.12	T.	8	4	18	8	sw.	S. L. Brown.
Point Pleasant	Mason	553	26	55.6	+ 0.7	88	7†	19	2	44	2.34	−0.94	0.47	0	12	7	12	11		W. D. Holmes.
Powellton	Fayette	933	25	55.8	+ 1.5	86	10	24	1†	41	3.31	0.39	0.71	0	11	9	13	8	w.	J. F. Campbell.
Raleigh	Raleigh	2,130	3								2.84		0.60	0.2	12					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	3								2.62		0.90	0	6				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	19	53.2	+ 0.1	90	9	20	2	45	2.77	1.01	0.72	0	14	8	6	16		E. C. Brace, Jr.
Ryan	Roane	700	16	52.7	+ 0.1	87	9	14	2	46	2.99	−0.83	0.59	0	14	10	6	14		Wm. E. Ryan.
Sissonville	Kanawha	625	3																	J. N. Johnson.
Spencer	Roane	784	15																	A. M. McKown.
Sutton	Braxton	839	13	53.4	− 0.2	88	9†	13	2	45	2.81	−1.48	0.81	0	9	19	11	0		C. B. Eakle.
Union	Monroe	2,250	15	51.4	+ 0.5	87	9	18	1	52	2.20	−0.80	1.00	0	4					Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	9																	J. M. Ayres.
Williamson	Mingo	660	19	54.4	− 0.9	85	9	25	1†	44	2.64	−1.34	0.72	0	12	16	7	7	w.	J. F. Keyser.
Averages and	extremes			52.9	− 0.1	90	9†	12	2	52	2.73	−0.82	1.12	T.	10	11	8	11	w.	
State averages and	extremes			51.8	− 0.1	90	9†	8	2	52	2.44	−1.12	1.12	0.2	9	12	8	10	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. [d] Received too late to be included in means and summaries.

[r] Approximated by the observer.

Daily Precipitation for April, 1919.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac	.24	T.			T.					T	.29		.02	.01	.19		T.	.16						T.	T.			.02	.10			1.03
Brandywine	do				*	.32			T.	.13		.62					.45								.25					.02	.08		1.87
Burlington	do										.30			T.		.20	.30								.90						T.		1.70
Harpers Ferry				do					.91						T.	.95				.30	.40						.38								2.94
Martinsburg	do		T.		*							.95			*	.20	.26	.09			T.			.35								1.85
Moorefield	do		T.									.72					.52								.60						.01		1.85
Piedmont	do		T.		T.				T.		.43					.14	.51	.07	.03			.10			.42	.03	T.		T.		.08		1.81
Romney	do								T.			.75			T.	.35	.40		T.		T.				.50	T.	T.				T.		2.00
Upper Tract	do					.10						.70				T.	.70								.10						.10		1.70
Wardensville	do		T.			.20					.01		.62				.07	.20		T.					*	*	*	.46					1.56
Northern Division.																																	
Bens Run	Ohio								.40		.05	.56					.48	.04	.05			.34			.61				.26		.25		3.04
Brandonville	Monongahela			T.	T.				T.			.66				.18	.05	.46		.12	T.	.68			.76	T.	T.		T.	.18			3.09
Buckhannon	do	T.		T.	T.				T.		T.	.80				T.	.67		.25										T.	.80	.10		2.62
Central Station	Middle Is. Creek																																
Cortland	Monongahela		.47										.33								.40				.25								1.45
Creston	Little Kanawha	T.				T.				.29		.45	.26				.10	.11	T.			.10		.12	.68				T.	.22	.02		2.35
Davis	Monongahela	.12	.04			T.						.18					.07		T.	.80			.13		.88	T.			T.	.08	.16		2.46
Elizabeth	Little Kanawha									.26		.74					.33			.30			.19	.06	.22					.18	.01		2.29
Elkins***	Monongahela	.02			.04				T.		T.	.57			T.		.01	.40	.01	.03		.05	.08	T.	.49	T.	T.		.09	.04	.11		1.94
Fairmont	do	T.	T.		.01					.10		.20	.37				.02	.18	.47	.04	T.		.26			.15	T.	T.		T.	.10			1.90
Glenville	Little Kanawha									T.		.40	.32		T.		.41		.09				.15		T.	.16	T.			.28			1.81
Gratton	Monongahela		T.						T.			.81					.77	.05	.09				.18			.28				.10	.03	.15		2.46
Lost Creek	do	T.			T.				.10			.54			T.	T	.81	T.	T.				.11			.35					.15		2.06
Mannington	do	.01			.03				.14			.58	T.			.03	.65	.07	.12				.28			.23				.08	T.	.17		2.39
Morgantown	do																																
Moundsville	Ohio			.45				.47	.20			.43					.50		.10			.28			.07				.10		.37		2.97
New Cumberland	do	T.			.30			.12			.27	.33						.75	.10			T	.24		.08	.15	T.			.09		.24		2.67
New Martinsville	do	T.							.20			.60					.50		T.	.15			.26			.28	T.			.10		.15		2.18
Parkersburg ***	Ohio	T.		T	T.				.26		T.	.37			T.		.60	.02	.02			.20	.04	.07	.14	T.				.08		.29		2.09
Parsons	Monongahela																																
Philippi	do																																
Pickens	do	.24		.15					.05			T.	.34		T.		.60	T.	.01			T.	T.						.39		.14		1.92
Rowlesburg	do	T.	T.							T		.10	.42			.04		.56	.12	T.		.15			.34					.44		2.17
Saint Marys	Ohio				.01						.35	.01	.60	.34			T.	.62	.25			.30		T.	.44				.15	.03			3.16
Smithfield	Fishing Creek	.04			.07					.17		.21	.29			.03	.20	.45	.11	.01		.24			.26				.14	.14			2.36
Terra Alta	Monongahela	.08							T.			.54		.03	.04	.09	.66	.26	.10			.21			.35	T.	T.		.04	.10	.11		2.61
Wellsburg	Ohio				.19						.05	.35		.01		.22	.50	.06	.07			.21			.30	T.			.10		.28		2.30
Westo	Monongahela									.10		.65					.60								.60				.10	.10	.10		2.25
Wheeling	Ohio		T.		.16				T.	.18		.11	.17	.01	T	.03	.33	.20	.07	T.		.31			.10	.02	T.		.02	.07			1.78
Southern Division.																																	
Bancroft	Great Kanawha									.10		.55	.10		.05		.30	.21	.05						.71	.44				.49	.20		3.20
Beckley	do																																
Bluefield	do	.16			.27	.10			.10			.63					.50	.05							.42	.32			.07		.68		3.24
Bramlett	do																																
Camden-on-Gauley	do	T.			.20				.21			1.00					.80	T.	T.				.10	.80				1.00		.10		4.21
Charleston				do					T.				.10		.90	.15		T.		T.					T.		.84	.48				T.	.35	.25	3.07
Clay	do									.20		.70	.25				.25	.30							.20	.40					.50		2.80
Cuba	Sand Creek							T.	.20			.50			T.		.48	T.	T.			.15	T.	.10	.16				.15	.08	.45		2.27
Dam 15 O. R.	Ohio								.30			.28	.05				.30	.20	.10			.24		.08	.18				.03	.05			1.81
Dam 20 O. R.	do									.55		.35	.06				.28	.13	.12	.02		.15		.10	.12				.04	.16			2.06
Dam 22 O. R.	do									.31	.10	.57	.04				.34		.02				.40						.02	.17	.05		2.02
Dam 26 O. R.	do									.42		.30	.15				.40	.15				.30			.85	.04	T.			.30	.07		2.98
Elkhorn	Big Sandy																																
Evans	Ohio								.44		.02	.72					.55	T.			.12		T.	.23	.29				.14		.41		2.92
Gary	Big Sandy				.36				.10			.12	.40				.11	.45	.03						.43	.40					.20	.25		2.85
Green Sulpr. Spgs.	Great Kanawha	T.							.20		T.	.22					.50		T.						.23	.47			T.		.17	.54		2.33
Hinton	do	T.				.28				.20		.20	.18				.08	.30	.02						.14	.32					.02	.28		2.32
Holcomb	do	.08			*	.15			.07			.79		T.	.07		*	*	.67			.07	.04	*	.56				.23		.37		3.10
Huntington	Ohio	T								.40		.60			.04	T.	.32		.04						.40	.32					.40	.18		2.70
Kanawha Falls	Great Kanawha					T.				.17		.45	.10				T.	.50								.30	T.				.35	.30		2.17
Kaycord	do	.05				.15				.23					.26		.12	.42	.04			.08			.29	.59				T.	.36	.45		3.04
Lewisburg	do				.19	.11				.06		.77					.48								.13	.36					.06	.35		2.51
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do	T.			.35							1.12			.04		.64	T.	T.			.04			.60	T.			.10	T.	.22		3.11
Point Pleasant |||	Ohio								.30			.40			.02		.47	.02				.15	.06	.20	.10				.12	.10	.40		2.34
Powellton	Great Kanawha				.08				.17			.71					.43	.07				.10		.24	.53				.01	.32	.65		3.31
Raleigh	do	.02				.23				.17		.33	.25				.04	.42				.07		.35	.23				T.	.13	.60		2.84
Reedy	do					.30						.90						.55						.20	.27						.40		2.62
Robertsburg	do					.03				.28		.70	.02		.05	.02	.25	.17	.03			.16		.57	.12					.25	.12		2.77
Ryan	do				.02	.03			.32		T.	.59			.04		.48	.01	.07			.16	.18	T.	.28				.23	.15	.43		2.99
Sissonville |||	do																																
Spencer |||	Little Kanawha																																
Sutton	Great Kanawha					T.			.28			.81					.58	.12	T.					.18	.28				.08	.36	.12		2.81
Union	do											1.00					.50							.20							.50		2.20
White Sulphur Spgs	do																																
Williamson |||	Big Sandy	.01				.10				.08		.68	.04				.21	.33				.08		.50	.36				T.	.10	.15		2.64

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

|| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for April, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	26	37	58	56	58	60	61	67	79	68	65	61	58	61	75	61	40	40	53	59	65	67	74	65	32	41	67	54	57	57	....	57.4
	Minimum	13	10	27	36	39	42	38	34	39	44	41	35	40	39	41	38	31	22	32	27	39	23	37	28	22	24	28	38	39	44	....	33.0
Brandywine	Maximum	45	47	65	60	62	75	80	78	82	70	65	65	64	80	78	75	70	55	68	75	71	72	74	70	52	50	70	69	67	64	....	67.3
	Minimum	20	14	21	34	42	32	39	40	42	45	53	40	38	35	40	48	40	38	24	31	48	27	45	40	28	32	27	43	47	42	....	36.5
Burlington	Maximum	33	42	64	63	65	73	81	79	80	66	65	57	58	65	65	54	56	52	63	75	65	70	76	66	42	48	67	65	64	57	....	62.5
	Minimum	26	22	23	37	42	33	37	44	46	53	50	41	35	38	43	46	41	40	27	31	45	29	35	35	32	34	29	40	44	35	....	37.3
Martinsburg§	Maximum	38	45	65	67	67	77	80	77	82	65	61	65	59	62	62	53	55	53	65	78	70	70	76	65	43	53	70	64	66	53	....	63.5
	Minimum	25	22	25	36	46	41	43	43	50	46	47	48	44	39	42	46	46	39	34	36	44	34	37	43	31	32	33	38	47	38	....	39.2
Moorfield	Maximum	48	49	69	66	68	82	84	84	88	87	68	68	67	63	71	71	58	56	69	77	74	73	79	76	49	57	74	73	66	65	....	69.3
	Minimum	23	18	22	43	44	33	37	43	47	47	54	42	43	35	43	48	46	39	26	33	46	30	62	49	32	35	30	47	49	37	....	39.4
Piedmont	Maximum	34	41	65	66	67	79	82	83	76	60	62	64	59	59	64	55	53	49	67	76	71	68	77	73	38	46	70	61	65	59	....	63.0
	Minimum	22	19	26	42	41	35	41	46	48	50	44	47	38	37	43	45	43	39	29	34	43	33	38	36	27	30	31	45	46	35	....	37.8
Romney	Maximum	....	....	....	65	69	81	84	83	87	80	67	67	65	61	68	56	57	51	69	78	74	72	79	67	43	47	74	73	68	65	....	68.5
	Minimum	....	....	....	50	40	35	40	42	47	45	56	47	44	38	42	44	46	40	26	38	50	30	36	39	29	32	32	46	48	37	....	40.7
Upper Tract	Maximum	44	44	65	63	62	69	79	80	85	80	76	70	65	68	70	70	70	67	67	70	74	74	70	60	60	75	70	70	68	65	....	68.3
	Minimum	16	18	22	30	35	33	39	40	44	46	48	39	38	35	34	45	40	31	27	38	39	38	38	30	28	30	30	32	38	40	....	34.7
Wardensville§	Maximum	35	45	63	63	65	75	76	79	76	....	67	....	65	....	67	54	54	52	65	....	....	75	....	....	....	60	68	....	66	....	....	63.5
	Minimum	23	20	22	40	43	42	38	44	44	45	....	38	....	34	....	35	46	35	26	30	....	....	36	....	....	....	27	43	....	36	....	35.6
Northern Division.																																	
Bens Run	Maximum	33	48	60	62	60	78	80	71	86	80	71	63	60	60	82	67	57	55	68	73	70	76	79	74	42	56	68	63	62	57	....	65.4
	Minimum	24	19	27	42	37	37	42	48	48	62	47	43	44	43	46	54	39	39	32	39	42	39	45	37	29	32	32	48	43	40	....	40.0
Buckhannon	Maximum	40	43	63	61	63	74	79	76	82	79	69	64	58	55	81	74	58	48	61	72	68	76	77	60	50	50	64	64	59	61	....	64.3
	Minimum	22	15	23	40	41	35	40	47	45	62	55	42	38	40	47	57	40	35	28	34	44	35	55	40	28	30	28	46	46	44	....	39.4
Creston	Maximum	39	52	63	60	67	80	82	76	89	80	73	67	66	64	87	72	56	59	73	77	76	75	81	76	47	60	69	64	68	59	....	68.6
	Minimum	25	16	25	42	42	56	43	47	48	60	49	43	46	43	57	48	42	39	29	37	46	38	46	41	31	32	31	49	46	48	....	41.5
Elkins	Maximum	25	39	60	55	56	73	74	74	80	75	65	60	53	58	80	67	45	44	63	69	66	75	77	59	35	46	65	59	60	54	....	60.4
	Minimum	18	16	22	35	39	32	37	42	44	65	46	46	38	34	48	45	37	32	26	31	41	32	49	30	25	28	28	44	44	41	....	36.5
Fairmont§	Maximum	32	48	62	64	67	77	83	75	87	81	56	64	60	55	86	63	49	53	67	75	69	79	81	59	41	54	70	56	62	58	....	64.4
	Minimum	21	16	19	25	42	35	41	42	46	47	53	41	42	37	40	47	41	37	28	29	43	36	39	46	28	29	28	45	43	40	....	36.9
Glenville	Maximum	37	50	65	64	65	77	83	83	89	88	78	67	67	65	89	87	67	54	71	77	77	80	84	84	46	66	71	70	66	67	....	71.1
	Minimum	22	13	21	40	38	32	38	44	46	60	48	46	44	58	43	56	41	37	29	33	40	34	50	41	29	31	26	45	47	42	....	38.5
Grafton	Maximum	33	47	63	62	64	79	82	76	88	83	76	65	65	56	84	82	61	51	66	....	....	76	77	82	40	49	70	57	60	57	....	66.1
	Minimum	21	14	21	40	39	32	48	46	46	62	47	41	44	36	46	53	40	37	27	....	....	32	32	36	28	29	27	44	36	36	....	37.1
Lost Creek	Maximum	32	48	63	61	65	75	78	72	82	78	72	66	59	56	82	71	57	53	65	70	65	71	80	73	45	53	68	59	60	59	....	64.6
	Minimum	22	12	19	39	39	32	39	45	42	62	46	40	38	36	42	54	38	38	24	34	41	32	43	38	28	28	25	40	40	39	....	36.5
Mannington	Maximum	32	44	59	61	65	74	79	77	81	80	76	62	60	54	81	80	59	52	62	73	71	74	77	75	39	52	65	64	58	56	....	64.7
	Minimum	23	14	22	40	35	31	35	44	45	56	47	39	40	35	43	53	41	37	26	32	39	33	39	37	28	31	26	44	43	34	....	36.4
Morgantown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
New Cumberland	Maximum	42	46	53	63	62	75	76	72	81	76	67	56	53	57	65	60	60	53	63	72	64	69	76	65	40	48	66	66	58	60	....	62.1
	Minimum	21	16	22	47	41	28	45	46	45	57	46	42	41	36	44	51	37	37	24	38	38	34	37	29	24	26	29	50	37	35	....	36.8
New Martinsville	Maximum	33	49	59	63	65	78	80	74	86	84	71	64	60	58	84	81	64	55	68	74	72	75	79	75	42	58	69	67	62	59	....	66.9
	Minimum	24	15	25	43	38	46	41	46	48	58	48	43	42	40	46	55	40	38	29	37	39	37	42	38	28	32	29	46	43	40	....	39.2
Parkersburg	Maximum	34	49	60	62	65	78	79	71	84	79	63	62	59	59	82	63	49	54	66	76	67	76	78	62	41	55	67	59	60	58	....	63.9
	Minimum	24	21	30	44	38	44	50	54	50	63	48	44	45	45	47	47	40	40	32	43	45	43	48	36	30	32	32	51	46	46	....	41.9
Parsons	Maximum	46	41	63	60	61	75	79	76	84	78	67	60	61	58	82	66	48	46	65	71	71	75	73	60	32	46	68	65	61	55	....	63.1
	Minimum	19	8	19	34	37	29	32	41	45	55	45	38	35	30	43	45	38	35	23	28	41	28	38	32	28	29	25	36	35	36	....	33.6
Philippi	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Pickens	Maximum	26	44	53	....	40	73	75	71	83	74	72	64	61	60	80	66	45	41	65	69	74	77	76	67	44	44	67	58	60	59	....	61.7
	Minimum	14	19	32	....	38	35	35	45	45	48	44	34	38	34	54	44	33	31	25	38	38	49	52	30	23	23	24	43	44	34	....	36.1
Terra Alta	Maximum	24	35	55	53	57	70	75	74	78	77	66	56	55	51	76	60	54	40	60	68	64	67	74	72	31	38	65	62	56	52	....	58.8
	Minimum	13	10	21	29	35	32	38	44	51	48	45	40	38	36	40	42	34	31	24	30	38	36	37	30	22	24	26	40	38	39	....	33.7
Wellsburg	Maximum	32	44	54	65	67	75	78	72	81	80	71	59	54	56	70	68	62	52	66	73	79	72	78	66	60	54	67	68	69	67	....	65.3
	Minimum	22	16	23	42	36	32	39	45	47	58	48	42	41	35	45	52	39	40	25	32	33	32	36	34	29	32	24	46	39	32	....	36.5
Weston	Maximum	34	46	62	62	63	76	78	81	85	85	77	65	63	58	83	81	58	50	64	73	72	77	79	78	63	52	66	64	61	59	....	67.1
	Minimum	22	15	23	41	41	35	47	43	45	52	47	43	45	40	44	54	40	36	28	37	44	37	49	40	29	31	28	47	46	43	....	39.1
Wheeling§	Maximum	32	51	58	65	66	80	80	73	86	80	58	63	59	54	79	63	51	57	70	74	72	74	82	57	44	57	72	56	61	56	....	64.3
	Minimum	24	11	11	28	40	36	36	45	50	50	50	46	40	39	40	46	40	39	30	30	40	37	40	40	27	27	28	30	43	40	....	36.1
Southern Division.																																	
Beckley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	68	70	49	68	68	77	79	62	58	70	70	72	69	68	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	40	37	26	35	40	41	40	27	28	41	33	51	45	40	....	....
Bluefield	Maximum	33	45	60	58	58	....	74	72	81	79	66	63	60	63	78	70	62	49	65	69	70	70	74	74	60	51	61	72	70	62	....	64.4
	Minimum	18	24	27	38	41	....	34	45	48	65	45	38	45	38	45	41	37	33	28	41	52	48	52	54	26	27	30	50	52	49	....	40.3
Charleston	Maximum	52	54	67	63	69	82	82	76	90	89	84	79	74	68	79	75	76	79	82	85	82	83	84	78	71	73	74	74	72	64	....	75.3
	Minimum	23	23	23	28	45	39	37	45	50	51	47	43	43	45	47	42	40	41	39	42	41	50	56	56	30	31	30	44	42	49	....	40.7
Elkhorn	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Green Sulphur Spgs.	Maximum	34	44	56	50	55	72	78	69	80	72	70	72	62	63	75	70	54	46	62	71	66	64	76	71	50	62	69	67	68	60	....	63.6
	Minimum	20	20	20	30	40	30	38	40	44	58	50	40	40	34	45	53	39	38	25	30	49	33	34	42	28	29	32	31	50	47	....	37.0
Hinton§	Maximum	38	38	66	48	59	75	78	75	83	78	59	68	65	70	83	66	50	49	67	76	72	72	80	67	48	54	70	74	68	56	....	65.1
	Minimum	22	22	25	28	38	37	38	41	41	49	56	40	39	39	43	49	42	40	30	32	35	37	45	52	32	31	30	31	50	51	....	38.3
Holcomb§	Maximum	30	44	62	52	60	77	75	73	85	76	57	65	63	64	81	64	44	43	49	72	68	74	79	60	42	46	69	66	63	57	....	62.0
	Minimum	20	12	16	30	40	30	39	39	42	46	56	38	39	34	41	55	38	34	26	31	40	37	51	52	28	26	29	47	47	46	....	36.3
Huntington§	Maximum	41	53	64	56	62	80	82	75	88	70	62	70	68	67	82	65	50	56	71	79	71	75	82	58	50	61	52	70	65	65	....	66.3
	Minimum	26	25	28	31	40	40	48	52	52	54	48	45	47	48	49	52	42	42	33	35	50	42	48	57	31	32	33	36	50	50	....	42.2
Lewisburg	Maximum	33	44	63	56	58	73	75	72	83	73	65	65	63	59	78	70	57	44	65	72	70	71	76	68	41	50	66	70	66	59	....	63.5
	Minimum	18	18	21	34	39	31	38	41	43	56	48	39	46	34	43	50	40	37	24	31	50	34	50	41	27	28	28	49	52	49	....	38.0
Marlinton	Maximum	26	38	56	48	54	68	70	72	76	68	60	60	54	50	74	64	48	40	60	66	64	66	70	62	38	46	60	62	62	52	....	57.8
	Minimum	16	16	18	38	40	30	32	44	40	44	42	36	36	32	34	42	34	34	22	28	38	26	56	34	24	26	24	46	52	42	....	34.2
Point Pleasant	Maximum	42	54	64	60	66	80	88	79	88	86	73	69	68	65	85	81	57	57	70	79	74	79	81	78	49	60	70	68	67	63	....	70.0
	Minimum	22	19	27	43	37	39	44	48	49	65	48	45	43	45	44	54	41	41	30	40	43	37	55	45	28	30	29	50	48	47	....	41.2
Powellton	Maximum	34	47	65	66	63	75	78	78	85	86	76	64	63	67	83	83	65	50	72	72	68	75	81	81	53	57	68	73	74	65	....	68.9
	Minimum	24	24	27	38	44	37	45	47	52	68	48	42	45	42	53	55	43	41	31	39	40	42	52	52	32	32	31	50	50	52	....	42.6
Robertsburg§	Maximum	39	52	62	58	65	81	81	75	90	78	61	67	65	67	86	65	69	54	70	76	72	80	83	59	46	57	68	68	65	65	....	67.5
	Minimum	22	20	22	30	39	37	41	47	50	50	47	43	45	43	43	49	41	41	30	31	44	37	44	57	30	31	29	32	48	47	....	39.0
Ryan	Maximum	40	47	64	57	64	77	80	70	87	80	72	66	63	62	83	67	56	51	67	74	69	77	78	70	42	52	68	65	65	60	....	65.8
	Minimum	19	14	22	38	38	31	39	46	45	59	47	39	49	39	53	54	41	40	26	34	41	49	54	42	29	30	26	48	49	48	....	39.6
Spencer§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sutton	Maximum	36	48	65	65	62	65	78	78	88	88	88	68	68	63	85	85	61	48	68	70	70	75	83	82	47	52	70	70	65	64	....	68.6
	Minimum	22	13	20	35	42	33	37	42	45	60	46	40	38	33	42	52	38	38	27	33	47	46	53	43	29	30	25	45	46	45	....	38.2
Union§	Maximum	47	48	52	65	66	68	70	71	87	70	70	66	70	72	82	80	61	47	57	60	75	78	77	73	64	58	69	75	76	70	....	67.2
	Minimum	18	19	30	35	38	39	33	35	35	34	48	37	30	33	44	49	39	36	24	33	31	33	49	53	25	27	26	33	52	49	....	35.6
White Sulphur Spgs.	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Williamson§	Maximum	40	52	65	53	62	76	75	76	85	77	76	78	76	78	82	65	58	55	68	78	73	72	76	65	51	58	70	75	58	62	....	67.8
	Minimum	25	25	26	30	43	40	40	47	50	52	47	45	45	46	48	53	42	40	33	34	41	42	45	55	34	32	32	35	53	54	....	41.1

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.
Based on 850 records
M.G.

1.03
WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY
JUN 2

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MAY, 1919

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JUNE 24, 1919

Departure of the Mean Temperature from the Normal, May, 1919.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVII. PARKERSBURG, W. VA., MAY, 1919. No. 5

GENERAL SUMMARY.

While May was somewhat cooler and much wetter than usual, there were no periods of exceptionally cool weather for the season, the month being characterized by nearly continuously cool weather until the 27th, and the rainfall was favorably distributed over the State and throughout the month. Planting and cultivating, however, were considerably delayed by wet weather, and crops on creek bottoms in a few sections were flooded on the 20th. Frosts temperatures occurred in many localities on the 3d, 12th, and 19th, but there was practically no frost damage. The month closed with wheat and rye in excellent condition. The outlook was also good for oats, potatoes, and garden truck. Corn planting was nearly completed and early corn was being cultivated. The fruit outlook was only fair. Owing to continued rains, crops were generally weedy.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 29.94 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.23 inches on the 6th, and 29.49 inches on the 20th. Elkins, 30.22 inches on the 6th, and 29.52 inches on the 20th.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 61.5°. The departure from the normal for 42 stations having ten or more years of record was —0.9°. While seasonally warm weather prevailed from the 3d to the 9th and on the last four days, the temperatures were generally continuously below the normal from the 9th to the 27th, with the lowest readings on the 3d, 12th, and 19th. The highest temperatures, generally near 90° or above, occurred on the 30th and 31st.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 76 per cent; 8 p. m., 65 per cent. The May averages for the same hours for the past 30 years are 75 and 64 per cent, respectively. Elkins, 8 a. m., 81 per cent; 8 p. m., 67 per cent. The May averages for Elkins for the same hours for the past 19 years are 79 and 65 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 62 stations reporting, was 5.25 inches. The departure from the normal for 45 stations having ten or more years of record was +1.27 inches. Rain occurred in most sections on the 1st, 5-11th, 16-17th, and 20-25th, and there were scattered showers on the 2d, 4th, 14th, and 15th. Showers also occurred in a few sections of the southern counties on the 27th. The heaviest rain was recorded on the 8th, 10th, 17th, 20th-21st, and 24-25th.

HAIL.

Light hail storms occurred in sections of the following counties as follows: Mercer, 9th; Wood, 16th; Berkeley, Hampshire, and Jefferson, 22d and 23d; Hardy, 22d, 23d, 24th, and 25th; Fayette and Randolph, 24th. A moderate hail storm occurred at Moorefield, Hardy County, on the 9th, but not much damage resulted.

WIND.

The average wind velocity at Parkersburg was 4.9 miles per hour, or 0.4 mile below the May average for the past 29 years. The average at Elkins was 4.4 miles per hour, or 1.2 miles above the May average for 18 years. The highest velocity at Parkersburg was 22 miles per hour from the northwest on the 17th, and at Elkins 20 miles per hour from the south on the 20th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 46 per cent of the possible amount, or 8 per cent below the May average for 21 years. The average at Elkins was 49 per cent, or 5 per cent below the May average for 20 years.

MISCELLANEOUS PHENOMENA.

Aurora: Morgantown, Robertsburg, Romney, and Wardensville, 3d.

Fogs, dense: Bancroft, 5th, 15th, 18th, 19th, 22d, 26th, 27th, 28th, 30th, and 31st; Creston, 22d, 28th, and 30th; Elkins, 13th, 26th, 27th, and 30th; Grafton, 13th; Hinton, 3d, 15th, 26th and 28th; Mannington, 25th, 26th, 27th, 30th, and 31st; Marlinton, 3d, 22d, 26th, 28th, 29th, 30th, and 31st; New Cumberland, 15th, 16th, 19th, 25th, 26th, 27th, 29th, 30th, and 31st; Parkersburg, 25th; Raleigh, 28th; Romney, 20th; Rowlesburg, 19th, 26th, 27th, 29th, 30th, and 31st; St. Marys, 26th, 27th, and 31st; Wardensville, 17th; Wheeling, 26th, 27th, 29th, 30th, and 31st; Williamson, 10th, 13th, and 29th.

Frost, light: Burlington, Creston, Elkins, Mannington, Ryan, and Terra Alta, 19th; Parkersburg, 13th; Pickens, 18th and 19th.

Frost, heavy: Elkins and Pickens, 13th.

Frost, killing: Marlinton, 3d, 18th, and 19th; Parsons, 3d and 19th.

Halo, solar: Ryan, 28th.

Thunderstorms (dates and number of stations reporting): 1st, 1; 2d, 1; 5th, 6; 6th, 5; 7th, 5; 8th, 9; 9th, 11; 10th, 5; 15th, 6; 16th, 8; 17th, 2; 19th, 2; 20th, 2; 21st, 2; 22d, 8, 23d, 4; 24th, 8; 25th, 2; 28th, 1.

COMPARATIVE DATA FOR MAY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	57.2	.....	.....	3.18	....	....	....	..	..	..
1892	62.2	96	32	5.04	....	....	....	..	..	..
1893	59.5	92	30	4.51	6.41	1.83	....	12	9	10
1894	62.1	100	28	4.44	9.40	2.17	....	16	9	6
1895	61.6	105	20	2.60	6.31	0.79	....	12	11	8
1896	68.3	95	33	3.01	5.92	0.65	....	11	13	7
1897	57.6	90	23	4.60	7.06	2.17	....	13	10	8
1898	63.0	94	28	4.51	6.15	2.76	....	13	10	8
1899	64.1	96	35	5.17	7.68	3.17	....	11	11	9
1900	62.5	98	21	2.99	6.75	0.35	....	14	9	8
1901	61.8	96	21	6.15	8.88	2.50	....	11	10	10
1902	65.2	98	25	3.17	6.09	1.30	....	14	11	6
1903	64.3	95	20	3.03	6.24	0.80	T.	18	9	4
1904	61.8	98	25	3.55	5.80	1.54	T.	12	11	8
1905	64.2	96	26	4.95	7.96	1.90	0.0	12	10	9
1906	62.7	98	22	2.59	6.89	0.39	T.	15	9	7
1907	59.0	93	24	3.88	6.37	1.38	T.	12	10	9
1908	63.4	96	28	6.19	11.45	2.73	0.1	9	12	10
1909	60.8	93	21	3.82	6.05	1.80	0.1	14	9	8
1910	57.9	96	19	3.92	5.87	1.55	0.0	11	10	10
1911	66.0	100	22	1.46	6.35	0.03	0.0	20	8	3
1912	63.3	94	31	3.93	7.50	1.16	0.0	15	8	8
1913	61.6	95	19	5.16	8.86	1.89	0.0	14	8	9
1914	62.4	100	24	1.96	3.75	0.55	0.0	18	8	5
1915	61.1	92	29	4.22	6.85	2.56	0.0	10	9	12
1916	64.0	97	28	3.58	6.00	0.90	T.	14	9	8
1917	55.5	95	25	4.88	5.45	2.45	T.	11	8	12
1918	66.7	97	25	4.34	10.28	1.85	T.	15	9	7
1919	61.5	100	30	5.25	10.71	2.75	0.0	12	7	12
Means and extremes ..	62.1	105	19	4.00	11.45	0.03	T.	13	10	8

Climatological Data for May, 1919.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	3	60.2	.....	92	31	34	3†	42	3.94	.....	1.40	0	11	15	4	12	s.	Elmer Keister.
Burlington	Mineral	875	25	59.5	− 2.1	89	30	35	3	43	4.10	+0.30	0.75	0	9	12	11	8	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	30	.....	.....	.....	.....	.....	.....	.....	3.56	−0.16	1.59	0	11	.....	.....	.....	e.	S. W. Lightner.
Martinsburg	Berkeley	435	27	61.7	− 1.6	93	30†	40	1	40	4.92	+1.17	1.23	0	10	14	8	9	e.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	23	64.3	+ 1.2	97	31	37	3†	46	3.49	−0.13	1.10	0	10	24	2	5	.....	M. S. Henkel.
Piedmont	Mineral	919	6	60.8	.....	94	31	37	3	43	4.11	.....	0 75	0	14	14	9	8	se.	C. A. Suter, Jr.
Romney	Hampshire	824	21	62.4	− 0.2	98	31	36	19	47	5.02	+1.36	1.70	0	16	10	9	12	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	20	60.4[a]	− 1.5	94[a]	31	34[a]	18†	49[a]	3.43	+0.13	0.70	0	7	15	7	9	w.	J. M. Mallow.
Wardensville	Hardy	1,200	1	59.1[b]	.....	91[b]	30	35[b]	19	41[d]	4.85	.....	1.10	0	15	11[a]	7[a]	12[a]	w.	Luther F. Sutton.
Averages and	extremes	.....	....	61.0	− 0.8	98	31	34	3†	49	4.16	+0.44	1.70	0	11	14	7	10	w.	
Northern Division.																				
Bens Run	Pleasants	622	17	63.0	− 0.6	95	31	40	19	42	5.58	+1.13	1.05	0	15	16	5	10	.....	J. D. Riggs.
Brandonville ††	Preston	1,809	8	.....	.....	.....	.....	.....	.....	.....	5.54	.....	0.98	0	16	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	22	61.8	− 0.4	90	31	37	20	41	6.00	+1.62	1.20	0	16	14	3	14	.....	H. A. Darnall.
Cortland	Tucker	3,300	3	.....	.....	.....	.....	.....	.....	.....	4.74	.....	0.99	0	9	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	17	63.6	0	94	31	37	19	46	5.79	+2.23	1.85	0	14	13	2	16	sw.	J. M. Reed.
Davis	Tucker	3,093	10	.....	.....	.....	.....	.....	.....	.....	4.85	.....	0.79	0	14	14	4	13	w.	Ross C. Male.
Elizabeth ††	Wirt	646	7	.....	.....	.....	.....	.....	.....	.....	5.06	.....	.....	0	11	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	18	58.8	− 0.3	92	31	34	19	43	3.88	−0.10	0.66	0	16	6	11	14	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	13	62.0	− 0.7	100	31	37	3	46	4.08	+0.06	0.98	0	17	18	1	12	w.	F. P. Hall.
Glenville	Gilmer	738	25	64.8	+ 1.4	99	31	35	3	50	4.93[b]	+0.98	0.88	0	15	14	9	8	w.	Howard R. Brannon.
Grafton	Taylor	1,000	26	62.6	+ 0.2	98	31	36	19	45	3.75	−0.61	0.82	0	16	14	10	7	e.	W. C. Byers.
Lost Creek	Harrison	1,026	21	60.8	− 0.2	93	31	34	3†	48	5.11	+1.00	1.58	0	12	15	4	12	w.	Allen Smith.
Mannington	Marion	974	16	60.8	− 0.6	91	31	35	19	43	4.85	+0.83	1.43	0	18	12	4	15	sw.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	26	62.4[b]	− 0.3	94[b]	31	41[a]	1†	39[b]	3.77	+0.18	0.83	0	14	11	6	14	nw.	R. W. Muldoon.
Moundsville	Marshall	642	16	62.6[a]	− 0.7	97[a]	30	34	19	45[a]	4.18	+1.12	0.95	0	9	14	10	7	sw.	M. Z. White.
New Cumberland	Hancock	987	21	58.8	− 2.1	94	31	35	13†	40	5.22	+2.06	1.10	0	14	10	11	10	sw.	M. F. Smith.
New Martinsville	Wetzel	634	25	63.5	− 0.3	97	31	40	3†	43	5.41	+1.80	1.35	0	14	15	6	10	s.	Wm. Ankrom.
Parkersburg	Wood	638	32	63.0	− 0.3	93	31	43	13	37	5.00	+1.54	1.08	0	13	8	9	14	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	19	58.2	− 1.2	93	31	31	3	47	2.75	−1.15	.....	0	12	13	5	13	.....	J. W. Swisher.
Philippi	Barbour	1,149	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Attic G. Robinson.
Pickens	Randolph	2,697	16	58.5[a]	− 0.5	92[a]	31	34[a]	13†	41[a]	7.47	+2.47	1.77	0	13	16	4	11	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	32	.....	.....	.....	.....	.....	.....	.....	4.47	+0.19	1.04	0	14	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	10	.....	.....	.....	.....	.....	.....	.....	6.07	+2.36	0.68	0	15	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	13	59.0	− 2.5	93	31	34	3	43	6.59	+2.64	2.17	0	17	15	10	6	se.	G. M. Whisler.
Terra Alta	Preston	2,612	18	56.4	− 3.2	93	31	34	3	40	5.47	+0.43	1.07	0	17	14	4	13	w.	Charles W. Gray.
Wellsburg ††	Brooke	1,225	18	60.4	− 0.5	96	30†	35	3†	45	4.56	+1.10	0.83	0	15	15	6	10	w.	George P. Pfister.
Weston	Lewis	1,026	23	62.8	− 0.4	93	31	38	3†	43	3.60	−0.65	1.20	0	10	9	11	11	.....	Weston State Hospital.
Wheeling	Ohio	645	32	61.6	− 1.6	95	29†	38	13	46	4.52	+1.06	0.69	0	15	15	9	7	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	61.2	− 0.7	100	31	31	3	50	4.92	+0.96	2.17	0	14	13	7	11	w.	
Southern Division.																				
Bancroft	Putnam	574	15	62.6	− 1.7	90	30†	39	12†	43	6.38	+2.37	1.20	0	14	16	0	15	nw.	R. E. Dent.
Beckley	Raleigh	2,440	19	61.8	+ 1.8	88	27	38	11	36	6.98	+3.78	1.54	0	11	9	9	13	w.	John A. Ewart.
Bluefield	Mercer	2,558	24	62.0	− 0.5	85	31	40	3†	36	4.65	+0.92	0.91	0	19	10	16	5	.....	Norfolk & Western Ry.
Breading	Mingo	507	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	4	.....	.....	.....	.....	.....	.....	.....	10.71	.....	2.00	0	11	11	0	20	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	16	63.6	− 2.7	94	30	40	4†	51	7.77	+3.86	2.42	0	12	15	0	16	w.	C. V. Lewis.
Clay	Clay	706	3	.....	.....	.....	.....	.....	.....	.....	4.55	.....	0.80	0	10	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	17	62.6	− 0.6	92	31	38	18†	49	3.70	+0.31	1.20	0	13	11	15	5	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	3	.....	.....	.....	.....	.....	.....	.....	5.80	.....	1.38	0	12	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	3	.....	.....	.....	.....	.....	.....	.....	5.90	.....	0.72	0	15	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	4	.....	.....	.....	.....	.....	.....	.....	4.81	.....	0.66	0	13	.....	.....	.....	nw.	U. S. Engineer Office.
Dam 26 O. R.	Mason	505	3	.....	.....	.....	.....	.....	.....	.....	7.82	.....	2.20	0	13	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans[a]	Jackson	606	7	62.9	.....	86	30	37	8	37	6.80	.....	1.58	0	14	16	0	14	.....	B. F. Sayre.
Gary ††	McDowell	1,426	3	.....	.....	.....	.....	.....	.....	.....	4.35	.....	0.93	0	14	.....	.....	.....	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs.	Summers	1,600	23	59.4	− 2.6	86	5†	35	20	41	6.35	+2.94	1.14	0	13	9	4	18	w.	W. H. Gwinn.
Hinton	...do	1,450	22	62.4	− 1.9	91	30†	40	3†	45	5.00	+1.21	0.94	0	15	10	1	20	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	7	59.2	.....	91	30†	33	19	49	5.09	.....	1.03	0	14	11	4	16	.....	R. C. Ferguson.
Huntington	Cabell	538	25	64.6	− 0.3	98	31	41	12	45	6.40	+2.45	1.34	0	15	10	4	17	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	0	.....	.....	.....	.....	.....	.....	.....	5.84	.....	1.30	0	10	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	3	.....	.....	.....	.....	.....	.....	.....	5.94	.....	1.39	0	14	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	19	60.4	− 0.5	87	31	36	3	39	5.02	+1.29	0.97	0	14	7	11	13	s.	Geo. T. Argabate.
Logan	Logan	687	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	20	56.2	− 2.6	84	30†	30	19	40	6.71	+2.84	2.10	0	15	3	13	15	sw.	S. L. Brown.
Point Pleasant	Mason	553	26	63.8	− 1.7	93	31	40	12†	43	5.10	+1.33	0.81	0	14	9	4	18	.....	W. D. Holmes.
Powellton	Fayette	933	23	63.8	− 0.3	95	31	39	19	44	5.37	+1.48	1.10	0	14	8	12	11	w.	J. F. Campbell.
Raleigh	Raleigh	2,130	3	.....	.....	.....	.....	.....	.....	.....	5.69	.....	1.43	0	12	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	3	.....	.....	.....	.....	.....	.....	.....	5.50	.....	1.40	0	11	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	19	62.8	− 1.5	95	30†	40	3†	45	4.92	+1.36	1.23	0	13	14[a]	1[a]	15[a]	.....	E. C. Brace, Jr.
Ryan	Roane	709	16	61.4	− 1.2	92	31	36	19	44	5.20	+1.70	1.62	0	17	11	7	13	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. M. McKown.
Sutton	Braxton	839	13	63.4	− 1.9	93	30†	37	3†	48	4.82	+0.63	1.66	0	12	19	11	1	.....	C. B. Eakle.
Union	Monroe	2,250	15	62.0	+ 1.1	90	30†	35	3	44	5.59	+2.97	2.00	0	7	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Ayres.
Williamson	Mingo	660	19	63.2	− 2.8	89	5†	42	12	43	5.51	+1.70	1.47	0	15	13	8	10	w.	J. F. Keyser.
Averages and	extremes	.....	....	62.0	− 1.2	98	31	30	19	51	5.86	+1.95	2.42	0	13	12	6	13	w.	
State averages and	extremes	.....	....	61.5	− 0.9	100	31	30	19	51	5.25	+1.27	2.42	0	13	12	7	12	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

r Approximated by the observer.

Daily Precipitation for May, 1919.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac					.03			.45		1.40				.28		.05	.20			.70	.08	.05	T.	T.	.20							3.94
Brandywine	do	.50																															
Burlington	do	.75						.50	.30	.55	.67				T.	.48		*			.70	.15	T.		T.								4.10
Harpers Ferry ‖‖	do	.11	.40			.10	.08				1.50							.10	.10			.72		.10	.30	.05							3.56
Martinsburg	do	.75			T.			.20		*	1.67							.12			*	1.30	.63	.14	.11							4.92
Moorefield	do	.63						.08	.17	1.10	.57							.34			.04	.48	.02		.06							3.49
Piedmont	do	.72	.03	T.		T.	.28	.25	.75	.60	.07	T.	T.	.07	T	.14			.73	.11	.16	T.	.11	.09								4.11
Romney	do	.67			T.		*	.14	*	1.12	.10	.23			.04	.10	.10	.24			*	1.70	.50	.04	T.	.04						5.02
Upper Tract	do	.43						T.	.60	.60	.70	T				T.		.30			.70	T.	.10									3.43
Wardensville ‖‖	do	.35	.35			T.		.12	.08	.33	1.10	.04			T.	.01	.01	T.	.06			1.10	.75	.35	.18	.02						4.85
Northern Division.																																	
Bens Run	Ohio	.29				.70	.20	.28	.18	.68	.66	.04				.12		.35			1.05	.08	.12	.39	.44								5.58
Brandonville ‖‖	Monongahela	.30	.26		.08			.19	.23	.55	.42	.33	.05	T.	T.	T.		*	.72		.84	.40	.05	.14	.98								5.54
Buckhannon	do	.25	.15				.15	.50	.80	.15	.90	.10				.15		.40			1.20	.30	.20	.10	.40	.25							6.00
Central Station	Middle Is. Creek																																
Portland ‖‖	Monongahela	.35	.50					.42	.21	.99		.47						.51			.84						.45						4.74
Preston ‖‖	Little Kanawha	.62	.15		.05		.15	.27	.32	.47	.97	.92				T.		.62			1.13	.72		.15	T.	.15						5.79
Davis ‖‖	Monongahela	.30	.50	.06				.18	.52	.43	.79	.28	.10			T.		.64				.57	.23		.09	.16						4.85
Elizabeth ‖‖	Little Kanawha	.61	.05					.51		.41	.71							.45			1.30	.40		.16	.17	.29						5.06
Elkins ***	Monongahela	.41			.01		.07	.52	.18	.61	.18	.07			.20	.06	T.	.38			.58	.01	.09	.03	.48							3.88
Fairmont ‖‖	do	.45	.35		.02		.10	.30	.27	.20	.48	.05	T.			T.	T.	.28	.04		.04	.98	.18	.05	.06	.23						4.08
Glenville ‖‖	Little Kanawha	.44	.10					.08	.41	.22	.88	.06	T.		.15			.34			.37	.80	.15	.15	.20	.58						4.93
Grafton	Monongahela	.22	.13		.03	.05	.06	.28	.05	.12	.45				*	.15		.43			*	.78	T.	.82	.18							3.75
Lost Creek	do	.40	.06		T.		.58	.15	T.	.22	.81	T.	T.		T.			.48			1.58	.20	T.	.22	.30	.11						5.11
Mannington	do	.46	.10		.04	.22	.14	.31	.03	.24	.74	.01	.01				.07	.39			1.43	.14		.09	.27	.16						4.85
Morgantown	do	.55	.08			T.	.12	.10	.15	.50	.43	.12	T.		T.	T.	T.	.32			.83	.12	T.	.12	.15	.18						3.77
Moundsville ‖‖	Ohio					.40	.15	.33	.95						.10		.65				.95	.25	.40									4.18
New Cumberland	do	.76	.09		T.	.06		.35	.08	1.10	.90	.01				T	.10	.32			.52	.17	T.	.40	.36							5.22
New Martinsville	do	.30				.10		.70	.06	.35	.85		.05				.10	.35			1.35	.10	.20	.28	.60							5.41
Parkersburg ***	Ohio	.26			T.	1.08	.25	.15	.52	.41	.17	T.			T.	T.	.49	.21		T.	.82		.05	.30	.29							5.00
Parsons	Monongahela		T.					*	*	*	*	*	1.80		T.	T.		*	.45		*	*		*	.50							2.75
Philippi	do																																
Pickens	do	.61						.54	.32	1.23	1.77				.30	.12		.64			.50	.30	*		.93	.18						7.47
Rowlesburg ‖‖	do	.28	.25					.16	.37	.22	.38	.45				T.	.08	.48	.10		T.	1.04	.26	T.	.16	.24						4.47
Saint Marys ‖‖	Ohio	.37	.18	T.	.04		.30	.63	.32	.64	.65	T.	T.					.50			.68	.52	.08	.68	.44	.04						6.07
Smithfield ‖	Fishing Creek	.53	.20		.06		.25	.50	.17	.40	.56	.01	.01					.68			1.08	1.09	.16	.15	.68	.06						6.59
Terra Alta	Monongahela	.37	.03		.04	.01		.29	.65	.25	.47	.16			T.	.06	T.	.66			1.07	.09	.08	.03	.98	.23						5.47
Wellsburg	Ohio	.55				.04	T.	.30	.01	.54	.49	.03				.34	.02	.63			.83	.10		.35	.31	.02						4.56
Weston	Monongahela							.10	.15	.20	.45				.10			.50			1.20	.20			.40	.30						3.60
Wheeling ‖‖	Ohio	.51	.05		T.			.32	.25	.51	.65	.04				T.	.08	.55			.28	.53	.16	.20	.30	.09						4.52
Southern Division.																																	
Bancroft ‖‖	Great Kanawha	.57	.10				.10	.30	.70	.40	1.00	.10						.42			1.20	.48		.20	.40	.41							6.38
Beckley	do							.48	.10	.87	.11			.72			.55	.65	.66		.64				.66			1.54				6.98
Bluefield	do	.20	.03				.04	.06	.52	.91	.15			.10	.48	.04		.45			.45	.20	.07	.05	.02	.63		.05	.20				4.65
Breading	do																																
Camden-on-Gauley ‖‖	do	1.00						1.00	1.00	2.00	.80							.80			1.00	1.50	.20	.11	1.30							10.71
Charleston ‖‖	do	.65	.15					1.10	.30	.20	1.25				T.			.35			.68	1.74		.30	.40	.65						7.77
Clay ‖‖	do	.40						.35	.20	.60	.30						.60				.50	.60		.20	.80							4.55*
Cuba	Sand Creek	.25				.10	.20	.20	.15	.50	.40					T.	.08	.18			1.20		.05	.19	.20							3.70
Dam 19 O. R. ‖‖	Ohio	.53	.10				1.38	.38	.20	.80	.55							.72			.60	.21			.30	.03						5.80
Dam 20 O. R. ‖‖	do	.68	.10			.06	.72	.37	.11	.65	.66						.02	.58			.70	.21		.26	.21	.57						5.90
Dam 22 O. R. ‖‖	do	.51	.15				.40	.20	.26	.45	.63							.39			.64	.66		.21	.25	.06						4.81
Dam 26 O. R. ‖‖	do	.38	.05				2.20	.20	1.50	.70	1.06							.32			.73	.08		.12	.20	.28						7.82
Elkhorn	Big Sandy																																
Evans	Ohio	.37				.30	.31	.43	.69	.74	.85						.15	.34			1.58		.05	.15	.81	.03						6.80
Gary †††	Big Sandy	.35	.18				.17		.36	.04	.93				.48			.10	.55		.04	.35		.10	.10		.60					4.35
Green Sulpr. Spgs.	Great Kanawha	.45				T.	.15	.42	.87					.41	.52				.47			.41	.38	.48	.36	1.14	.29					6.35
Hinton ‖‖	do	.62	.20					.18	.14	.40	.20				.72	.08		.06	.46		T.	.68	.94	.04	.02	.26						5.00
Holcomb	do	.37			.06			*	*	*	1.24			T.				1.03			*	*	1.17	*	*	.98			.24			5.09
Huntington ‖‖	Ohio	.36	.04				.38	.46	.28	1.12	1.30	.04				.32		.38			.76	.22		.20	.28	.26						6.40
Kanawha Falls ‖	Great Kanawha	.48	.20						1.30	.15	.75	.10			.28			.25	T.			1.10				1.23	T.					5.84
Kaylord ‖	do	.34	.40			T		.69	.15	.35	T.	.13			*	.37		.43	.06		.23	1.25		.15		1.39						5.94
Lewisburg	do	.84						.16	.03	.10	.32	T.		.20	.66			.67			.35	.30	.15	.01	.26	.97						5.02
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do	1.16			.03	.04		.64	.96	1.14	.12			.04	.64		T.	.36			.42	.38		.06	.48	.24						6.71
Point Pleasant ‖‖	Ohio	.48				.28		.37	.40	.54	.73					.15	.60	.21			.80		.10	.18	.22	.04						5.10
Powellton	Great Kanawha	.45					.08	.18	.35	.41	.30	.06			.40			.45			1.10	.05		.17	.72	.65						5.37
Raleigh ‖‖	do	.29						T.	.33	.23	.82	.05			.64	T.		.37	.15			.76	T.	.05	T.	1.43			.57			5.69
Renick ‖	do	*	1.00						.20	1.40					*	*		.60	*			.75				1.30		.25				5.50
Robertsburg ‖	do	.30	.10				.10	.40	.46	.60	.55							.35			.85	.38		.08	.20	.55						4.92
Ryan	do	.21				.01	.38	.08	.25	.75	.63	.10			.02	T.	.04	.29		.03	1.62	.01	.02	.01	.75							5.20
Sissonville ‖‖	do																																
Spencer ‖	Little Kanawha																																
Sutton	Great Kanawha	.36						.12	.44	.46	.25				.30			.42			1.66	.12	.22		.26	.21						4.82
Union	do	1.50													2.00			.70				.70	.30	.15			.24					5.59
White Sulphur Spgs.	do																																
Williamson ‖‖	Big Sandy	.32	.42			T.		.22	.08	.11	.16	.05			.43	.20		.53			1.24	.23	T.	.12	.10	1.30						5.51

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for May, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum																																
	Minimum																																
Brandywine	Maximum	67	68	76	85	84	67	79	76	78	62	65	57	65	62	69	74	70	73	72	68	74	70	69	70	79	80	85	81	85	90	92	73.9
	Minimum	43	42	34	50	54	55	54	58	54	47	42	46	34	50	48	42	38	37	34	56	55	44	45	44	42	41	47	55	50	49	52	46.5
Burlington	Maximum	53	66	78	87	87	64	68	65	64	54	60	58	68	63	70	70	68	69	75	68	74	68	69	72	76	79	84	78	83	89	87	71.4
	Minimum	47	46	35	52	55	54	51	58	52	42	44	40	37	47	43	39	55	45	36	54	58	48	46	43	53	43	47	51	48	50	56	47.6
Martinsburg§	Maximum	55	65	79	90	91	60	73	65	60	50	58	62	73	68	72	67	68	74	78	70	80	75	67	76	77	82	88	82	87	93	93	73.5
	Minimum	40	46	44	50	58	53	50	51	55	47	45	46	41	49	47	49	53	48	42	43	56	55	50	47	52	50	52	56	55	57	60	49.9
Moorfield	Maximum	58	73	83	92	91	86	84	76	70	64	68	63	70	69	77	75	75	76	78	77	78	79	74	77	80	83	89	87	90	94	97	78.5
	Minimum	49	49	37	58	63	56	49	54	54	46	45	45	41	52	47	41	55	41	37	60	58	51	50	45	53	45	49	53	51	63	56	50.1
Piedmont	Maximum	52	68	80	88	86	75	76	74	65	56	57	59	68	65	72	70	67	70	75	72	74	70	68	72	76	80	87	83	86	91	94	73.4
	Minimum	48	45	37	51	53	52	51	57	55	45	44	41	38	47	48	40	54	45	38	54	56	48	44	45	53	45	50	52	50	53	58	48.3
Romney	Maximum	55	71	85	92	90	84	75	73	66	58	60	63	71	70	73	72	70	73	79	73	78	79	72	74	79	83	90	90	89	94	98	76.7
	Minimum	48	47	38	60	62	53	51	58	54	47	44	44	37	43	45	43	41	45	36	51	57	47	46	43	53	46	51	50	48	53	54	48.2
Upper Tract	Maximum	61	68	75	88	85	84	81	75	72	65	60	67	67	69	70	77	77	75	74	74	75	68	68	78	80	....	89	87	89	89	94	76.0
	Minimum	47	48	38	39	50	49	49	50	53	48	44	37	38	40	42	39	40	34	34	50	55	45	45	42	42	....	47	46	49	49	52	44.7
Wardensville§	Maximum	56	72	76	70	68	56	77	60	65	50	63	59	67	68	72	73	....	70	75	76	70	77	69	76	76	79	86	88	90	91	....	71.6
	Minimum	37	42	47	50	55	55	50	52	50	45	43	45	38	46	43	41	43	....	35	43	55	49	45	43	....	45	48	50	49	51	55	46.6
Northern Division.																																	
Bens Run	Maximum	68	64	81	85	78	82	77	68	71	61	55	62	77	75	71	76	65	71	78	66	62	70	64	71	76	82	88	87	89	90	95	74.4
	Minimum	54	46	41	58	56	49	61	56	54	55	49	44	42	51	51	46	51	45	40	58	51	51	51	52	52	50	54	54	57	57	62	51.5
Buckhannon	Maximum	63	66	79	80	85	80	76	73	75	75	67	54	72	64	67	77	60	66	77	65	62	68	64	70	73	76	85	83	84	88	90	73.0
	Minimum	53	48	38	65	66	50	63	57	60	57	47	43	40	52	49	41	48	42	45	37	52	48	50	43	56	45	50	54	55	55	57	50.3
Creston	Maximum	68	69	83	87	82	82	80	75	78	75	56	59	75	80	72	79	70	72	83	76	64	70	67	75	79	82	86	86	90	93	94	77.0
	Minimum	54	42	39	57	56	48	61	57	59	55	49	39	38	50	49	45	52	41	37	59	52	50	51	48	55	44	49	53	55	58	57	50.3
Elkins	Maximum	60	62	78	85	80	74	73	71	75	67	51	52	65	61	67	75	61	63	74	65	54	61	62	65	70	74	82	83	85	89	92	70.2
	Minimum	49	44	35	60	56	49	58	57	58	51	43	40	35	49	45	40	50	39	34	53	50	47	45	43	48	42	46	50	52	51	52	47.5
Fairmont§	Maximum	58	69	83	88	85	85	78	75	74	59	49	61	76	68	73	78	65	74	82	64	60	74	65	71	76	83	89	88	93	96	100	75.5
	Minimum	44	46	37	44	54	49	54	56	56	52	47	43	41	45	51	43	50	40	38	41	53	49	51	46	54	47	50	54	54	57	60	48.6
Glenville	Maximum	65	70	85	89	90	85	82	89	78	77	59	57	76	77	76	83	71	74	83	81	70	70	70	71	79	85	89	90	92	95	99	79.3
	Minimum	52	43	35	58	50	49	60	57	66	58	47	37	36	52	49	40	54	41	37	59	52	49	51	46	55	47	51	54	55	59	59	50.3
Grafton	Maximum	68	69	85	89	85	83	76	77	74	72	56	59	71	69	70	81	69	71	80	74	62	71	68	70	74	82	85	88	91	94	98	76.2
	Minimum	52	45	37	56	53	49	59	56	57	51	46	40	37	52	47	39	52	40	36	59	53	49	50	45	54	45	49	51	52	51	55	48.9
Lost Creek	Maximum	65	68	82	84	81	80	78	73	73	68	54	60	68	67	72	77	66	65	78	71	62	66	63	65	72	76	83	82	84	89	93	73.1
	Minimum	52	45	34	59	51	53	61	56	57	54	47	38	39	51	45	39	52	37	34	61	52	46	51	43	52	42	46	50	51	53	54	48.5
Mannington	Maximum	63	66	79	85	83	82	75	74	68	66	56	56	72	69	69	75	65	67	76	75	62	66	66	68	73	77	82	82	86	89	91	73.0
	Minimum	52	45	36	58	51	46	57	55	55	52	46	42	37	50	48	40	51	38	35	58	53	49	51	46	51	45	48	50	51	51	56	48.5
Morgantown	Maximum	70	....	80	84	83	81	75	72	67	63	53	56	70	70	71	....	66	68	80	71	63	70	65	71	72	79	83	83	88	91	94	73.8
	Minimum	41	....	42	59	57	48	57	54	53	48	45	41	41	53	52	47	51	41	41	57	52	50	51	49	52	58	51	58	58	57	62	51.0
New Cumberland	Maximum	67	64	77	83	79	78	77	71	52	53	52	54	69	71	69	73	65	68	71	69	63	65	61	64	72	78	82	80	85	90	94	70.8
	Minimum	49	50	51	59	48	38	56	48	47	48	44	41	35	43	46	40	50	41	35	51	51	50	49	44	43	46	46	48	48	52	58	46.9
New Martinsville	Maximum	68	68	83	86	84	85	78	76	65	60	56	60	77	75	74	76	73	72	80	73	66	69	65	71	77	82	88	87	92	95	97	76.0
	Minimum	53	47	40	58	56	47	60	56	54	55	48	44	40	48	52	45	52	43	40	58	53	50	51	50	53	49	53	54	55	57	61	51.0
Parkersburg	Maximum	67	68	82	87	79	83	79	66	63	57	53	56	73	70	77	77	66	68	77	68	64	68	64	70	76	78	85	85	86	92	93	73.3
	Minimum	54	47	45	63	53	50	62	56	53	52	47	45	43	51	53	51	52	47	44	56	53	52	52	54	51	51	55	58	62	61	64	52.8
Parsons	Maximum	55	55	80	80	85	80	70	69	65	66	64	75	69	63	68	76	60	65	77	66	57	65	63	67	76	77	89	89	89	92	93	72.4
	Minimum	45	45	31	40	45	44	49	48	46	47	45	41	35	45	45	35	45	37	32	56	52	47	42	40	41	42	45	46	49	45	60	44.0
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum	59	63	77	84	....	82	70	71	74	70	51	55	70	58	65	75	65	65	74	68	54	63	61	62	73	79	84	85	86	91	92	70.9
	Minimum	48	41	37	55	....	50	58	58	55	50	40	42	34	48	43	40	48	38	34	50	48	39	42	38	50	40	48	51	53	50	55	46.1
Terra Alta	Maximum	56	60	74	75	75	68	68	68	68	52	46	50	64	60	63	73	61	61	72	61	55	63	55	61	66	70	82	80	86	90	93	67.0
	Minimum	46	40	34	56	55	48	48	50	52	42	39	35	36	46	46	38	44	38	36	51	48	42	46	42	50	44	50	52	53	52	57	45.7
Wellsburg	Maximum	67	67	79	84	83	81	84	73	57	57	54	54	73	74	70	75	67	68	75	72	65	70	70	68	73	80	86	87	89	96	96	74.0
	Minimum	51	41	35	55	50	37	56	48	52	51	46	41	35	45	46	40	52	38	35	55	52	52	50	48	50	45	49	47	46	51	56	46.9
Weston	Maximum	64	67	81	86	85	82	78	73	74	72	58	55	73	70	72	79	68	68	80	76	63	68	68	70	74	79	86	86	86	91	93	75.0
	Minimum	46	48	38	61	56	51	62	57	60	57	48	40	40	52	46	44	52	41	38	58	52	49	51	46	55	45	49	54	55	55	58	50.5
Wheeling§	Maximum	67	68	83	89	80	87	79	70	56	60	52	59	75	78	75	77	65	75	79	66	64	72	62	68	77	84	89	88	95	95	90	75.0
	Minimum	42	46	41	43	60	44	46	55	53	53	48	43	38	42	50	45	47	45	40	41	52	51	51	51	51	51	51	52	54	56	55	48.3
Southern Division.																																	
Beckley	Maximum	68	70	75	82	80	80	78	78	78	74	58	55	59	69	75	69	72	69	76	74	62	70	74	76	74	87	88	83	83	84	85	74.4
	Minimum	45	40	41	54	54	55	57	56	57	46	38	40	47	49	46	40	59	40	40	48	46	40	48	62	49	54	55	56	55	56	54	49.3
Bluefield	Maximum	62	66	76	84	82	78	77	78	78	73	61	64	64	60	68	77	74	75	72	66	69	70	69	72	69	80	79	81	82	83	85	73.4
	Minimum	47	46	40	55	58	59	56	57	59	60	48	40	45	46	48	47	43	41	40	57	48	50	48	42	54	50	59	57	62	54	56	50.7
Charleston	Maximum	69	73	85	91	89	84	79	71	72	68	70	60	59	62	80	84	80	73	82	84	79	77	72	75	81	81	82	84	91	94	93	78.2
	Minimum	49	45	42	40	45	52	59	60	49	48	47	50	43	45	49	44	52	42	40	41	42	46	49	51	49	51	51	53	62	60	59	48.9
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum	62	64	74	85	86	74	82	84	80	67	56	59	66	57	70	72	74	70	70	72	71	61	67	66	67	66	76	82	84	86	86	72.1
	Minimum	49	42	37	44	50	49	56	56	56	50	51	45	37	44	40	44	42	41	37	35	58	51	47	45	44	45	46	47	57	55	52	46.8
Hinton§	Maximum	64	69	79	87	89	80	79	81	75	76	59	59	60	60	71	80	68	69	79	67	60	68	68	75	77	84	80	87	87	91	91	74.8
	Minimum	49	45	40	42	48	54	58	59	59	60	53	40	40	46	49	47	49	42	40	42	52	48	49	50	51	52	52	54	60	60	57	49.9
Holcomb§	Maximum	64	65	70	87	84	78	78	75	76	72	60	55	66	63	68	78	68	60	76	69	55	66	63	68	76	80	83	88	87	91	91	72.9
	Minimum	49	38	34	38	40	50	58	58	57	57	50	37	35	43	47	40	47	39	33	39	50	41	44	42	44	46	46	50	53	51	51	45.4
Huntington§	Maximum	73	73	86	92	82	78	86	70	75	56	59	59	70	74	81	80	72	76	79	79	68	69	69	67	83	62	81	87	93	96	98	76.5
	Minimum	50	48	44	47	55	55	56	61	60	55	51	41	45	50	53	55	55	45	43	46	53	47	50	52	55	54	56	60	61	65	63	52.6
Lewisburg	Maximum	61	66	75	83	82	70	76	77	75	67	58	58	59	59	67	77	69	66	73	70	64	67	64	71	74	79	83	82	83	86	87	71.9
	Minimum	46	46	36	45	52	55	56	60	58	56	50	41	43	48	48	42	52	38	37	56	50	44	45	46	53	46	53	56	55	52	54	49.0
Marlinton	Maximum	54	60	72	80	78	68	70	70	72	62	52	52	60	56	62	70	64	62	68	66	60	62	60	62	72	76	78	78	82	84	84	67.6
	Minimum	44	46	32	42	48	44	46	50	54	52	48	38	32	46	44	46	46	34	30	50	50	42	42	40	48	40	48	50	52	52	54	44.8
Point Pleasant	Maximum	70	73	84	90	86	85	85	74	69	67	58	58	73	71	77	79	74	73	80	74	69	71	66	70	79	83	88	88	89	92	93	77.0
	Minimum	55	44	41	62	56	54	52	57	54	52	50	40	42	51	50	49	52	43	40	41	50	46	51	53	52	48	54	55	57	60	60	50.7
Powellton	Maximum	69	70	85	84	83	80	71	76	77	73	62	57	63	67	73	83	83	69	78	77	66	62	66	66	68	82	82	88	88	89	90	75.2
	Minimum	53	45	41	53	56	56	61	62	59	59	49	41	42	57	52	46	54	42	39	60	52	48	52	49	57	51	52	62	61	60	57	52.5
Robertsburg§	Maximum	75	70	85	87	80	83	79	70	75	58	58	60	72	74	72	79	69	76	81	71	73	70	67	69	69	85	85	84	91	95	95	76.0
	Minimum	47	42	40	45	54	52	53	59	60	55	51	40	44	45	46	48	52	42	40	44	49	43	48	50	56	48	52	56	58	60	60	49.6
Ryan	Maximum	68	68	80	85	80	82	79	73	76	70	55	55	70	66	73	78	63	68	80	70	61	69	63	69	75	80	76	85	85	91	92	73.7
	Minimum	53	40	37	54	50	50	59	59	59	53	49	37	37	52	49	44	49	39	36	59	52	46	50	46	46	44	49	53	55	57	56	49.0
Spencer§	Maximum																																
	Minimum																																
Sutton	Maximum	64	70	85	90	90	84	81	80	75	73	60	58	75	75	74	80	80	73	75	75	63	72	72	66	78	80	87	87	85	93	93	77.2
	Minimum	51	45	37	56	54	51	58	57	59	55	47	38	37	50	49	42	51	41	37	57	50	46	50	45	54	46	49	56	56	57	56	49.6
Union§	Maximum	58	69	79	80	80	86	81	87	83	85	72	70	63	56	71	78	80	78	80	78	72	67	64	75	78	86	85	87	88	90	90	77.2
	Minimum	45	46	35	40	41	50	50	55	52	50	43	41	43	46	47	42	50	52	37	40	49	45	43	46	50	50	49	54	55	51	53	46.8
White Sulphur Spgs.	Maximum																																
	Minimum																																
Williamson§	Maximum	68	69	71	88	89	81	79	68	79	64	58	65	62	73	80	68	67	79	60	56	54	62	68	70	72	78	80	86	88	88	89	72.9
	Minimum	55	46	45	45	53	58	60	62	61	61	52	42	43	46	52	52	53	48	44	46	53	50	50	54	58	60	60	62	65	66	61	53.6

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.
Based on 850 records.
W. T.

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JUNE, 1919

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JULY 26, 1919

Departure of the Mean Temperature from the Normal, June, 1919.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVII. PARKERSBURG, W. VA., JUNE, 1919. No. 6

GENERAL SUMMARY.

The past month was the warmest June since 1892 and was characterized by continuously high temperatures until into the last decade, when two short periods of cool weather occurred. The temperatures averaged higher at several of the stations in June, 1892. While the rainfall averaged considerably above the normal, it was unfavorably distributed over the State. Excessive rains and local floods caused considerable damage to crops in sections of Harrison County on the 14-15th and in a number of localities in the southern counties on the 24-26th. Hail also caused some damage. Planting and cultivation were delayed by frequent rains. At the close of the month corn was small and wheat was being harvested, with the yield good to excellent.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.10 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.43 inches on the 13th, and 29.87 inches on the 27th. Elkins, 30.41 inches on the 13th, and 29.81 inches on the 27th.

TEMPERATURE.

The monthly mean for the State, 45 stations reporting, was 73.0°. The departure from the normal for 42 stations having ten or more years of record was +3.8°. The month opened with high temperature, and abnormally warm weather continued until the 22d. The highest readings in most localities occurred on the 1st. The temperatures were near or slightly below the normal on the 22-24th, and 28-30th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 75 per cent; 8 p. m., 66 per cent. The June averages for the same hours for the past 30 years are 79 and 68 per cent, respectively. Elkins, 8 a. m., 84 per cent; 8 p. m., 72 per cent. The June averages for Elkins for the same hours for the past 19 years are 84 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 62 stations reporting, was 5.06 inches. The departure from the normal for 45 stations having ten or more years of record was +0.51 inch. The rainfall was heaviest over the southern and central counties and lightest over the Ohio River and eastern panhandle counties. The greatest part of the rainfall was received on the 7-8th, 14-16th, and 24-27th; but showers occurred in many localities on the 5th, 11-12th, and 20th-21st, and in scattered localities on several other days. A 24-hour rainfall of 4.10 inches occurred at Lost Creek, Harrison County, on the 14-15th, and at Bancroft, Putnam County, the fall from 8 a. m. of the 25th to 8 a. m. of the 26th was 3.70 inches.

HAIL.

Light hail fell in sections of Preston and Randolph counties on the 1st, in Randolph County on the 8th, and in localities of Marion County on the 14th and 20th. Moderately heavy hail, doing some damage to crops, occurred as follows: Elkins and Lost Creek, 14th; Welch, 15th; sections of Greenbrier and Summers counties, 20th; Huntington, 21st.

WIND.

The average wind velocity at Parkersburg was 4.1 miles per hour, or 0.5 mile below the June average for the past 29 years. The average at Elkins was 3.7 miles per hour, or 0.4 mile above the June average for 20 years. The highest velocity at Parkersburg was 22 miles per hour from the northwest on the 7th, and at Elkins 32 miles per hour from the southeast on the 14th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 57 per cent of the possible amount, or normal as compared with the June average for 21 years. The average at Elkins was 61 per cent, or 9 per cent above the June average for 20 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st. 9th, 10th, 11th, 14th, 16th, 17th, 19th, and 22d; Burlington, 16th and 17th; Clay, 21st and 30th; Creston, 3d, 13th, 14th, and 30th; Elkins, 2d, 3d, 10th, 12th, 13th, 15th, 17th, and 18th; Fairmont, 17th; Hinton, 3d, 6th, 9th, 19th, 20th, and 29th; Holcomb, 3d and 13th; Lewisburg, 16th, 17th, 18th, and 20th; Mannington, 5th, 11th, 12th, 13th, 14th, 15th, 17th, and 18th; Marlinton, 2d, 3d, 4th, 12th, 13th, 18th, 22d, 29th, and 30th; New Cumberland, 2d, 3d, 18th, and 19th: Parkersburg, 16th; Romney, 9th, 10th, 11th, 12th, 14th, 15th, and 16th; Rowlesburg, 2d, 3d, 4th, 6th, 7th, 9th, 10th, 11th, 12th, 13th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22d, and 24th; St. Marys, 1st, 3d, 4th, 10th, 22d, and 23d; Smithfield, 8th, 16th, 17th, 18th, 19th, 20th, 21st, and 22d; Terra Alta, 12th, 13th, 15th, 16th, and 17th; Wheeling, 3d, 10th, 12th, and 19th; Williamson, 14th and 17th.

Halo, lunar: Wheeling, 6th.

Halo, solar: Wheeling, 2d and 10th.

Thunderstorms (dates and number of stations reporting): 1st, 8; 2d, 1; 4th, 6; 5th, 2; 6th, 1; 7th, 14; 8th, 8; 10th, 6; 11th, 8; 12th, 5; 14th, 17; 15th, 13; 16th, 13; 17th, 7; 18th, 2; 19th, 6; 20th, 10; 21st, 9; 23d, 4; 24th, 4; 25th, 11; 26th, 15; 27th, 4; 28th, 1.

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	71.2	.....	.....	5.02	....	....	....	..	..	..
1892	74.1	99	41	3.90	....	....	....	..	..	..
1893	70.2	99	40	3.81	6.41	1.83	....	13	10	7
1894	70.4	103	32	3.27	6.78	1.25	....	16	10	4
1895	72.1	102	38	2.92	5.66	1.20	....	15	10	5
1896	69.8	95	30	5.35	9.86	0.11	....	8	14	8
1897	69.3	96	35	4.31	6.77	1.31	....	12	12	6
1898	70.9	99	41	3.21	7.50	0.66	....	14	11	5
1899	72.0	98	35	4.99	8.93	1.46	....	14	9	7
1900	71.2	98	41	5.30	15.62	2.49	....	9	12	9
1901	70.7	104	32	5.67	11.10	1.37	....	12	12	6
1902	68.0	100	33	5.19	8.49	2.45	....	11	13	6
1903	65.1	93	34	4.80	12.30	2.01	....	8	11	11
1904	69.5	97	36	4.20	8.29	2.05	....	10	13	7
1905	70.6	100	34	4.38	7.72	1.74	....	13	11	6
1906	70.9	101	38	5.25	9.32	2.84	....	11	12	7
1907	65.3	97	33	6.00	11.95	1.93	....	10	11	9
1908	69.2	98	36	3.12	6.75	1.35	....	15	10	5
1909	71.1	101	35	5.73	9.19	2.47	....	9	13	8
1910	66.6	96	32	5.67	11.27	1.52	....	10	10	10
1911	70.7	101	40	4.44	9.34	1.88	....	14	10	6
1912	67.3	95	29	4.27	9.21	1.11	....	13	10	7
1913	69.5	99	29	3.44	6.55	0.86	....	18	8	4
1914	72.0	100	30	3.00	6.60	0.62	....	15	11	4
1915	67.7	95	33	3.63	7.09	1.21	....	15	8	7
1916	65.8	94	35	5.42	14.54	2.50	....	14	8	8
1917	67.7	99	31	3.81	6.58	1.38	....	14	9	7
1918	68.2	99	34	4.17	10.11	0.87	....	16	7	7
1919	73.0	100	40	5.06	10.15	1.67	....	16	8	6
Means and extremes ..	69.7	104	29	4.46	15.62	0.11	....	13	10	7

Climatological Data for June, 1919.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	3	69.9	.....	91	2	42	30	38	3.45	.....	1.00	0	11	22	5	3	s.	Elmer Keister.
Burlington	Mineral	875	25	70.6	+ 2.2	90	14†	43	30	34	2.38	−1.69	0.75	0	7	10	19	1	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	30	.....	.....	.....	.....	.....	.....	.....	3.75	−0.16	1.59	0	7	.....	.....	.....	e.	S. W. Lightner.
Martinsburg	Berkeley	435	27	73.8	+ 3.1	94	3†	50	30	32	7.25	+2.93	2.23	0	13	15	11	4	se.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	23	74.4	+ 5.2	96	1	46	30	37	3.30	−1.01	0.87	0	9	29	0	1	.....	M. S. Henkel.
Piedmont	Mineral	919	6	72.2	.....	94	1	46	29†	34	4.15	.....	1.71	0	12	6	14	10	se.	C. A. Suter, Jr.
Romney	Hampshire	824	21	73.0	+ 3.2	96	20	45	30	39	4.07	+0.21	1.25	0	9	10	17	3	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	20	70.8	+ 3.1	91	1	48	24	38	3.90	−0.55	1.00	0	10	21	5	4	w.	J. M. Mallow.
Wardensville	Hardy	1,200	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Luther F. Sutton.
Averages and	extremes	.....	....	72.5	+ 3.4	96	1†	43	30	39	4.11	−0.04	2.23	0	10	15	11	4	se.	
Northern Division.																				
Bens Run	Pleasants	622	17	74.8	+ 4.6	93	1	53	29	32	2.22	−2.54	0.49	0	9	19	9	2	.....	J. D. Riggs.
Brandonville	Preston	1,809	8	.....	.....	.....	.....	.....	.....	.....	3.12	.....	0.68	0	8	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	22	72.3	+ 3.7	91	3†	47	29	35	5.20	+0.27	1.37	0	8	21	5	4	.....	H. A. Darnall.
Cortland	Tucker	3,300	3	.....	.....	.....	.....	.....	.....	.....	6.18	.....	1.29	0	8	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	17	74.6	+ 4.1	95	1†	48	29	35	5.82	+1.44	1.99	0	10	20	1	9	sw.	J. M. Reed.
Davis	Tucker	3,093	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ross C. Male.
Elizabeth	Wirt	646	7	.....	.....	.....	.....	.....	.....	.....	3.75	.....	0.95	0	7	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	18	69.0	+ 2.4	89	1	45	29	37	6.40	+1.36	1.42	0	14	2	16	12	s.	U. S. Weather Bureau.
Fairmont	Marion	883	13	75.3	+ 5.3	100	3	49	29†	41	5.31	+0.72	1.07	0	13	24	2	4	s.	F. P. Hall.
Glenville	Gilmer	738	25	75.9	+ 5.4	98	1†	46	29	39	6.98	+2.63	2.05	0	12	20	6	4	w.	Howard R. Brannon.
Grafton	Taylor	1,000	26	73.8	+ 4.5	96	3	46	29	41	3.95	−0.73	1.81	0	8	24	1	5	w.	W. C. Byers.
Lost Creek	Harrison	1,026	21	71.5	+ 3.8	92	3	45	29	37	8.42	+4.49	4.10	0	10	20	5	5	w.	Allen Smith.
Mannington	Marion	974	16	72.0	+ 3.9	91	1	47	29	33	7.00	+2.98	1.41	0	14	18	5	7	ne.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	26	74.8[a]	+ 5.9	93[a]	1†	54	28†	34[a]	5.59	+0.99	1.56	0	10	12	8	10	.....	Prof. E. L. Andrews.
Moundsville	Marshall	642	16	74.8[a]	+ 5.1	97[a]	3	47	28	38[a]	1.67	−1.85	0.45	0	9	22	5	3	sw.	M. Z. White.
New Cumberland	Hancock	987	21	72.0	+ 4.1	94	1	43	29	36	3.55	−1.12	0.78	0	9	10	12	8	sw.	M. F. Smith.
New Martinsville	Wetzel	634	25	75.2	+ 3.8	96	1	51	29	37	4.10	+0.11	0.50	0	14	17	4	9	s.	Wm. Aukrom.
Parkersburg	Wood	638	32	76.0	+ 4.5	93	14	57	29	27	2.80	−1.85	0.69	0	11	11	8	11	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	19	68.4	+ 2.1	90	4	41	30	44	2.90	−2.92	1.40	0	3	16	11	3	.....	J. W. Swisher.
Philippi	Barbour	1,149	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Attie G. Robinson.
Pickens	Randolph	2,697	16	69.1	+ 3.9	94	11	42	29	42	8.27	+2.14	1.63	0	13	16	9	5	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	32	.....	.....	.....	.....	.....	.....	.....	5.90	+0.99	2.58	0	14	.....	.....	.....	e.	J. F. Pierce.
Saint Marys	Pleasants	577	10	.....	.....	.....	.....	.....	.....	.....	3.20	−0.44	1.10	0	8	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	13	71.2	+ 3.2	92	18	42	30	43	3.73	−0.89	0.77	0	14	21	7	2	se.	G. M. Whisler.
Terra Alta	Preston	2,612	18	68.7	+ 2.5	88	1	44	29	31	3.98	−3.83	0.53	0	16	15	10	5	e.	W. J. Grimm.
Wellsburg	Brooke	1,225	18	73.3	+ 6.0	96	1	43	29	44	3.64	−0.82	1.39	0	10	20	7	3	.....	George P. Pfister.
Weston	Lewis	1,026	23	73.2	+ 3.2	92	1†	49	29	33	8.00	+3.60	1.70	0	11	11	13	6	.....	Weston State Hospital.
Wheeling	Ohio	645	32	76.4	+ 5.9	100	1†	52	23†	39	2.77	−1.12	0.94	0	13	14	9	7	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	73.0	+ 4.2	100	1†	41	30	44	4.79	+0.16	4.10	0	11	17	7	6	sw.	
Southern Division.																				
Bancroft	Putnam	574	15	74.0	+ 2.9	92	19	52	30	31	7.44	+2.83	3.70	0	7	23	1	6	ne.	R. E. Dent.
Beckley	Raleigh	2,440	19	70.3	+ 3.1	88	1	51	29	31	5.92	+1.58	1.25	0	11	13	10	7	w.	John A. Ewart.
Bluefield [b]	Mercer	2,558	24	70.6	+ 1.7	88	2	51	30	29	4.29	−0.39	1.10	0	14	6	16	6	.....	Norfolk & Western Ry.
Breading	Mingo	507	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	4	.....	.....	.....	.....	.....	.....	.....	10.15	.....	2.30	0	13	8	1	21	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	16	77.8	+ 5.2	98	19	54	29	34	3.92	−0.60	2.00	0	5	22	0	8	w.	C. V. Lewis.
Clay	Clay	706	3	.....	.....	.....	.....	.....	.....	.....	6.32	.....	2.94	0	10	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	17	73.6	+ 4.6	93	1	50	29†	33	3.76	−0.19	0.90	0	9	16	13	1	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	3	.....	.....	.....	.....	.....	.....	.....	2.94	.....	0.80	0	10	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	3	.....	.....	.....	.....	.....	.....	.....	2.85	.....	0.98	0	10	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	4	.....	.....	.....	.....	.....	.....	.....	3.36	.....	0.90	0	9	.....	.....	.....	.....	Lockmaster.
Dam 26 O. R.	Mason	505	3	.....	.....	.....	.....	.....	.....	.....	4.23	.....	0.95	0	12	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans	Jackson	606	7	74.4	.....	90	10	51	7	33	3.75	.....	1.26	0	11	15	3	12	.....	B. F. Sayre.
Gary	McDowell	1,426	3	.....	.....	.....	.....	.....	.....	.....	6.13	.....	1.25	0	10	.....	.....	.....	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs.	Summers	1,600	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Hinton	..do	1,450	22	73.4	+ 2.7	94	1	51	30	38	8.04	+3.93	2.76	0	15	10	1	19	sw.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	7	69.4	.....	90	1†	43	30	41	8.63	.....	1.80	0	13	15	7	8	.....	R. C. Ferguson.
Huntington	Cabell	538	25	77.0	+ 4.5	98	1†	57	29	34	5.90	+1.63	2.04	0	9	16	0	14	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	0	.....	.....	.....	.....	.....	.....	.....	5.09	.....	2.30	0	7	.....	.....	.....	.....	J. O. Brown
Kayford	Kanawha	1,335	3	.....	.....	.....	.....	.....	.....	.....	5.08	.....	1.10	0	10	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	19	69.6	+ 2.1	88	1	47	30	33	5.44	+1.32	1.58	0	15	16	9	5	s.	Geo. T. Argabate.
Logan	Logan	687	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	20	66.0	+ 0.7	84	19	40	30	32	7.01	+2.20	1.28	0	16	2	20	8	sw.	S. L. Brown.
Point Pleasant	Mason	553	26	76.0	+ 3.3	96	1	52	30	33	4.21	−0.16	1.51	0	12	15	5	10	.....	W. D. Holmes.
Powellton	Fayette	933	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. F. Campbell.
Raleigh	Raleigh	2,130	3	.....	.....	.....	.....	.....	.....	.....	6.06	.....	1.66	0	12	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	3	.....	.....	.....	.....	.....	.....	.....	5.13	.....	1.92	0	6	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	19	75.8	+ 4.5	96	1†	53	30	34	4.59	+0.87	1.16	0	10	20	3	7	.....	E. C. Brace, Jr.
Ryan	Roane	700	16	73.4	+ 4.6	91	1†	49	30	34	7.20	+2.83	1.74	0	11	16	9	5	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	15	74.2	+ 5.1	92	1†	51	29	31	5.31	+0.80	1.50	0	7	19	5	6	.....	A. M. McKown.
Sutton	Braxton	839	13	75.1	+ 2.2	97	11†	48	15	43	7.67	+1.88	2.75	0	9	21	8	1	.....	C. B. Eakle.
Union	Monroe	2,250	15	70.9	+ 4.3	92	2	47	1	42	7.26	+3.16	2.25	0	10	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Ayres.
Williamson	Mingo	660	19	75.4	+ 3.2	92	10†	55	30	27	2.85	−1.99	0.77	0	10	17	10	3	w.	J. F. Keyser.
Averages and	extremes	.....	....	73.2	+ 3.4	98	1†	40	30	43	5.54	+1.23	3.70	0	10	15	7	8	w.	
State averages and	extremes	.....	....	73.0	+ 3.8	100	1†	40	30	44	5.06	+0.51	4.10	0	10	16	8	6	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

z Approximated by the observer.

Daily Precipitation for June, 1919.

tions.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
tle Division.																																	
.....	Potomac.....																																
ine.....	....do	.05				.37			.18	.02					1.00	.10	.26	.25			T.					.50	.12	.60					3.45
on.....	....do					.20		.63							.25	.75					T.	.15				.10	.30						2.38
Ferry ||||....	....do					*				.45	.50						.45						1.50			.30	.10	T.					3.75
urg.....	....do					.45	.40	*	2.02	2.23	.13			T.	.08	*	.78		T.		*	.70				.35	.56	T.					7.25
ld.....	....do					.26			.87			.06				.55	.17					.30				.12	.55	.42					3.30
t.....	....do	.09				.10	.03		.46			.10	T.	T.		1.71	.18	.15			T	.60			T.	.56	.03	.14					4.15
.....	....do					.30		.85	.04	.10					.77	.15				.34						.27	1.25						4.07
act.....	....do	1.00				.30		.25				.60				.40	.25								.10	.10	T.	.40	.50				3.90
ville||||....	....do																																
n Division.																																	
n.....	Ohio.....							.27				.49			.34	.16		.06				.26			.30	.04	.30						2.22
ville ||||	Monongahela. .								.35						.68	.51	.41	.40				.32				.10	T.	.35					3.12
non.....	....do		.22												.16	.30	1.37					T.			.67	1.07	1.34	.07					5.20
Station.....	Middle Is. Creek																																
||||	Monongahela...	.53							.54							.68	1.29		.48	1.20							.46	1.00					6.18
||||	Little Kanawha					T.			.10			.25		.06		1.47	.36	T.							.67	.60	1.99	.04					5.82
.....	Monongahela..																																
h ||||	Little Kanawha								.43							.86	.03							.23		.95	.52	.73					3.75
*	Monongahela ..	1.15				.07		.32	.37			.58			1.03	.78		.05		.01	.02	T.		T.	.40	.52	.99	.11					6.40
t ||||	....do						T.	T.	.36	.17	T.		.15	.02	.28	.78	1.07	.27			T.	.90			.09	.14	.50	.58					5.31
e ||||	Little Kanawha		.25						.28				.35			.84	.35	.15			.65	.05	.06		.90	1.05	2.05		T.				6.98
.....	Monongahela..	T.						.58				T.			.06	.66	.45	.20							T.	1.81	.17	.02					3.95
ek.....	....do.	.09			T.	T.			.42			.04			3.00	1.10	.92	.05				T.		T.	.80	.90	1.10						8.42
rton.....	....do		.07					.02	1.35		.05	.15			.59	1.41	1.00	.30			T.	.49			.32	.24	.72	.29					7.00
own	....do		.44						.81			.10				1.36	1.56	.58			T.				.18	.17	.05	.34					5.59
ville ||||	Ohio.....					.05		.23							.25		.17	.05						.10	.24	.13	.45					1.67
mberland. ...	....do				T.	.70			.12						.34	.47		.41	T.		.35	.07			T.	.31	.78	T.					3.55
rtinsville....	....do		.45		.02	.20		.35	.05						.33	.40	.50	.45				.10			.25	.30	.30	.40					4.10
sburg *** ..	Ohio.....				T.	.69		.18		.08		.19			.20	.47	T.					.41		.11	.32	.01	.23	T.					2.80
.....	Monongahela..	T.	.40			T.			T.						T.	T.	1.10							T.	1.40								2.90
.....	....do																																
	....do..	.68					.30	.31	.47			.06			.50		.45			1.63					.89	.54	1.39	.54	.51				8.27
urg ||||	....do		2.58				.05		.45			.30	.06			.04	.57	.08				.28	.14		.04	.45	.58	.28					5.90
rys ||||	Ohio.....						.20		.45				.22					.04							.74	.35	.10	1.10	T.				3.20
ld ||||	Fishing Creek..		.02						.23	.33				.15		.42	.77	.20	.05			.35	.25		.22	.26	.34	.14					3.73
ta.....	Monongahela ..	.53				.06		T.	.32	.14	.01	.16	.01	T.	.16	.53	.30	T.	T.	.32	T.	.01				.07	.53	.30	.53					3.98
g	Ohio.....					1.39		.05	.48	.70						.14		.19	T.			.05			T.	.15	.39	.10					3.64
.....	Monongahela..								.30				.95	.05	.15	1.05	1.70				.15	.20			1.05	1.15	1.25						8.00
g ||||	Ohio.....					.07	.25	T.	.05	T.			.09			.94	.03	.78	.01			.07				.15	.03	.15	.15	T.				2.77
n Division.																																	
||||	Great Kanawha								.93					.56		.95										.15	1.00	3.70	.15				7.44
.....	....do								.48				.58				.56	.28		.59					1.14	.79	1.25	.10	.15	.20			5.92
.....	....do		.04		.20				.20							.12	.30	.58	.50		.05	.15			.75	1.10	.15	.05	.10					4.29
g.....	....do																																
on-Gauley||||	....do	.20						.80	.33				.80		.34	1.30		1.00		.83				.25	1.00	2.30	.80	.20				10.15
on ||||	....do								.15	T.				T.		.92	T.					.40				.45	2.00					3.92
.....	....do							.30	.05				T.	.18	.03	.27	.12								1.05	1.20	2.94	.18					6.32
.....	Sand Creek.....					T.		.30	T.		.10					.65	.12				T.	.15			.53	.21	.80	.90					3.76
O. R. ||||	Ohio.....						.10		.34		.02					.80	.56						.17		.43	.12	.02	.38					2.94
O. R. ||||	....do					.02	.70		.20							.98	.09						.12		.34	.15	.15	.10					2.85
O. R. ||||	....do								*							.82	.08						.23		.22	.68	.22	.90	.21				3.36
O. R. ||||	....do					.06	.09		.64	.07				.35		.85	.08		.20						.16	.95	.70	.08					4.23
.....	Big Sandy.....																																
.....	Ohio.....					.05			.13						.15	1.26	.13				.02	.05			T.	.79	.26	.86	.05				3.75
.....	Big Sandy.....								.85			.20				1.25	1.00	.60							.32	.34	.65	.12	.80				6.13
lpr. Spgs....	Great Kanawha																																
|||	....do		.66			.04			.02	.12			.42			.14	.36	.04	.34			.76	.20		.74	1.22	2.76	.22					8.04
)	....do					.09		T.	T.			.65	.06		.59	.90					.57	1.22		*	1.80	*	*	2.66	.09				8.63
ton ||||	Ohio.....					.08			.40	T.				.02		1.84		.08		T.			2.04		.38	.66	.40					5.90
a Falls||||	Great Kanawha								.25							.18	.30				.22	.30				1.54	2.30					5.09
||||	....do								.50		T.					.63	.40				.15	.24			.32	.88	.82	1.10	.04				5.08
rg.....	....do		.49			.11			.18			.18	.06		.06	.31	.09	T.	T.	.08	.02	T.	T.	.15	1.21	.16	.76	1.58					5.44
.....	Guyandotte																																
.....	Great Kanawha																																
n	....do	T				.36		T	.18		.54	.28			.56	.36	.06	.98		.74	.08	.07		.08	1.28	.64	.72	.08				7.01
easant ||||	Ohio.....					.40		.36	.17						.23	.55	.13	.08						.06	.30	.30	1.51	.12				4.21
n	Great Kanawha																																
||||	....do								.35	.13			.46				.25	.15	.31				.28		.82	.84	1.66	.58	.23				6.06
||||	....do									.50			.20			1.00								.93			1.92	.58					5.13
burg ||||	....do					.27	.02		.20					.42		1.16									.28	.52	1.00	.50	.22				4.59
.....	....do.							.97	.02			T.	T.		1.49	.42	.10	T.			T.	.02		.05	.91	.92	1.74	.56					7.20
le ||||	....do																																
||||	Little Kanawha								.40							.81	.81								.88	.71	1.50	.20	T.				5.31
.....	Great Kanawha								.42				.16			.48	.71	.14			.28				2.75	.58	2.15						7.67
.....	....do		.60		.35							.92				.53		2.25				.47			.85	.28	.26	.75					7.26
ulphur Spgs.	....do ..																																
on ||||	Big Sandy.....								.48	.05	.02		.18			.46									.36	.34	.77	.03	.16				2.85
.....																																	

cept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
Trace, or less than 0.01 inch.
‡ Probably incomplete.

Daily Temperatures for June, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum																																
	Minimum																																
Brandywine	Maximum	90	91	89	88	82	85	87	81	82	84	85	84	85	86	87	84	84	87	88	90	81	80	75	75	73	84	80	75	74	78		83.1
	Minimum	55	53	52	55	60	57	50	58	53	55	58	59	60	58	59	60	62	58	60	60	58	56	50	62	60	65	63	60	44	42		56.7
Burlington	Maximum	89	88	89	89	75	86	85	78	81	82	83	82	84	90	84	81	84	87	86	90	82	78	80	77	76	83	82	75	73	77		82.5
	Minimum	58	58	55	58	60	64	53	60	51	59	60	64	59	60	63	62	63	62	68	63	66	54	47	54	63	65	65	57	44	43		58.6
Martinsburg§	Maximum	91	92	94	94	82	85	89	83	77	84	85	85	86	92	88	83	87	90	86	93	84	80	84	85	81	84	82	78	78	80		85.4
	Minimum	66	62	62	64	66	65	61	60	62	62	68	65	61	63	66	65	64	64	67	63	65	58	53	58	63	63	68	61	53	50		62.3
Moorfield	Maximum	96	93	92	92	89	93	90	89	87	89	85	88	89	91	90	89	87	92	90	94	92	82	84	80	81	89	89	80	76	83		88.0
	Minimum	62	59	56	60	63	64	54	60	59	61	62	66	62	63	68	64	64	63	68	62	67	57	50	65	62	67	66	60	47	46		60.9
Piedmont	Maximum	94	89	91	90	87	83	85	87	80	82	81	86	85	92	86	82	86	87	86	82	85	89	79	78	71	83	80	76	77	75		83.8
	Minimum	63	58	57	59	61	63	63	61	59	61	64	63	66	63	62	64	64	69	65	65	54	64	49	61	61	66	67	58	46	46		60.7
Romney	Maximum	93	93	92	94	93	94	92	89	85	85	86	82	90	93	93	87	89	90	89	96	90	81	81	82	79	79	86	83	76	79		87.4
	Minimum	54	58	56	57	56	57	53	60	61	62	60	61	58	62	63	60	62	62	70	62	65	53	47	65	61	60	62	58	46	45		58.5
Upper Tract	Maximum	91	89	89	89	87	88	87	88	86	85	85	85	87	88	84	85	87	87	87	89	89	88	84	81	81	87	85	74	75	75		85.4
	Minimum	60	60	62	60	57	51	50	52	50	54	55	56	59	60	57	57	58	57	58	59	58	58	50	48	49	62	62	56	56	55		56.1
Wardensville§	Maximum																																
	Minimum																																
Northern Division.																																	
Bens Run	Maximum	93	90	92	90	82	83	85	79	86	89	92	90	89	90	83	80	87	91	92	91	83	84	81	72	83	81	81	81	83	87		85.7
	Minimum	64	63	65	65	67	63	60	61	61	65	65	65	66	68	67	64	63	66	68	74	69	59	55	66	65	68	67	61	53	55		63.9
Buckhannon	Maximum	89	90	91	91	84	84	84	80	87	89	89	86	87	87	84	84	85	88	89	88	81	79	81	76	80	83	79	76	75	81		84.5
	Minimum	63	59	57	59	56	57	55	58	60	62	61	61	60	65	62	63	60	61	63	68	63	58	62	57	63	65	67	62	47	48		60.1
Creston	Maximum	95	92	94	95	86	85	88	83	90	93	95	94	92	92	88	85	90	92	95	93	88	84	85	71	85	86	84	79	83	85		88.2
	Minimum	61	61	62	60	67	59	55	56	56	60	61	61	62	63	65	66	63	62	66	67	66	57	53	65	64	68	62	64	48	52		61.1
Elkins	Maximum	89	87	87	87	74	80	83	78	81	85	85	85	83	83	80	82	82	86	85	86	78	77	81	70	74	81	75	74	73	82		81.1
	Minimum	58	55	53	56	61	56	51	55	52	55	58	59	56	60	60	60	61	59	60	64	61	55	50	62	60	64	65	50	45	45		56.9
Fairmont§	Maximum	98	97	100	98	82	83	89	83	90	93	95	93	93	90	92	93	92	96	96	92	85	86	87	75	82	83	83	80	85	90		89.4
	Minimum	61	60	59	59	65	59	55	58	59	62	63	63	61	67	65	64	64	65	70	66	57	54	58	65	65	67	68	60	49	49		61.2
Glenville	Maximum	98	98	96	96	94	87	89	91	91	93	97	98	95	96	95	86	91	96	97	96	86	87	88	73	81	87	87	85	85	89		90.9
	Minimum	63	62	62	60	65	58	53	57	57	60	61	63	61	64	64	63	61	63	64	67	64	68	53	64	62	60	67	65	46	50		60.9
Grafton	Maximum	95	95	96	94	79	89	89	83	89	93	90	91	91	89	88	88	88	91	94	90	88	82	87	83	81	85	80	80	78	88		87.8
	Minimum	68	58	57	59	64	58	54	58	51	59	61	61	58	65	62	62	63	61	63	68	63	54	50	65	64	66	68	59	46	47		59.7
Lost Creek	Maximum	90	87	92	91	83	81	84	78	84	88	90	91	86	90	88	86	87	91	90	89	88	80	81	70	78	78	79	76	77	81		84.5
	Minimum	58	57	55	57	64	55	51	56	54	57	58	59	57	60	62	61	68	61	59	63	64	60	52	64	64	65	61	60	45	47		58.5
Mannington	Maximum	91	88	89	90	85	83	82	82	83	87	89	87	85	88	86	83	84	87	88	88	81	80	82	79	79	81	79	78	77	81		84.1
	Minimum	60	59	57	57	64	57	52	57	58	61	61	60	59	64	63	62	63	63	63	67	65	54	50	65	63	68	67	59	47	48		59.8
Morgantown	Maximum	93	93	93	91	88	85	85	85	89	89	89	89	89	89	89	89	90	90	....	90	85	82	86	80	80	82	82	82	77	89		86.8
	Minimum	65	64	65	68	70	52	59	58	59	62	65	64	64	65	63	62	61	62	68	70	65	56	58	65	65	67	67	54	54	55		62.7
New Cumberland	Maximum	94	90	88	90	78	87	81	79	82	84	88	87	90	90	85	89	87	90	89	92	82	75	83	78	81	76	77	73	75	83		84.1
	Minimum	60	61	63	60	64	62	56	62	58	55	62	59	62	65	63	63	61	60	65	63	66	53	47	64	64	69	65	52	43	48		59.8
New Martinsville	Maximum	96	92	94	95	86	83	85	81	88	92	91	94	92	92	85	81	90	93	95	92	90	85	83	78	82	83	81	81	82	90		87.7
	Minimum	62	62	63	63	68	61	58	58	60	65	64	64	65	68	66	63	62	66	67	80	68	59	53	58	65	70	66	56	51	53		62.8
Parkersburg	Maximum	92	90	90	89	85	84	83	81	87	88	90	90	91	93	85	83	86	90	93	91	84	84	83	70	84	85	82	79	83	85		86.0
	Minimum	67	69	70	68	69	66	62	61	61	66	67	67	70	68	66	65	64	68	72	72	67	65	60	67	66	70	68	62	57	58		65.9
Parsons	Maximum	89	66	89	90	78	81	81	75	82	85	87	85	87	85	87	86	83	88	87	88	81	81	83	78	79	81	79	80	78	85		82.8
	Minimum	50	56	52	54	64	51	52	49	54	54	55	53	54	53	52	59	63	60	59	63	53	54	47	65	65	47	48	49	45	41		54.0
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum	88	89	87	75	78	83	78	80	84	85	94	88	84	85	85	84	85	89	87	87	81	80	81	77	77	81	77	76	81	85		83.0
	Minimum	58	57	55	61	61	51	60	62	51	57	58	57	54	53	51	58	58	56	58	50	51	52	52	57	57	61	61	52	42	43		55.2
Terra Alta	Maximum	88	86	85	86	72	78	79	75	80	84	83	83	82	86	78	82	78	86	84	84	78	78	80	70	74	76	75	76	74	78		79.9
	Minimum	62	57	56	59	62	56	51	56	53	57	61	58	58	62	60	55	60	61	62	63	61	51	50	60	60	62	63	59	44	47		57.5
Wellsburg	Maximum	96	93	95	93	80	82	84	82	86	84	88	89	91	91	89	93	88	90	93	93	89	85	86	79	86	84	81	83	81	89		87.4
	Minimum	58	59	61	59	66	57	54	58	58	57	61	59	61	65	63	61	61	61	63	66	67	52	46	64	65	70	63	52	43	45		59.2
Weston	Maximum	92	92	91	90	89	84	85	84	85	91	91	89	88	87	85	85	84	90	90	89	82	80	82	79	80	82	82	80	79	78		85.5
	Minimum	63	60	58	60	66	58	55	58	55	60	61	62	61	66	63	64	63	61	65	69	64	59	55	65	63	66	69	62	49	50		61.0
Wheeling§	Maximum	100	97	97	97	82	87	89	82	92	93	94	95	95	98	91	94	91	94	97	96	90	88	90	73	87	84	85	85	88	92		90.8
	Minimum	62	64	65	63	65	61	58	60	60	62	63	64	65	67	66	64	64	65	66	69	70	56	52	53	66	66	65	56	52	53		62.1
Southern Division.																																	
Beckley	Maximum	88	85	82	85	81	84	82	79	85	85	85	86	84	82	83	84	82	83	87	85	85	79	80	69	83	78	79	75	79	80		82.1
	Minimum	61	60	58	61	55	53	53	54	54	55	54	59	56	61	62	58	67	57	59	61	63	63	60	52	63	62	61	61	51	60		58.5
Bluefield	Maximum	84	88	81	77	82	....	83	84	82	85	85	84	81	82	83	84	82	83	86	83	82	....	82	79	78	82	81	77	78	78		82.0
	Minimum	57	61	64	63	56	....	55	55	55	56	60	61	59	58	60	60	58	62	60	62	62	....	60	61	60	66	62	62	55	51		59.3
Charleston	Maximum	94	93	92	92	92	94	93	90	93	93	95	95	93	94	89	90	92	96	98	97	90	88	89	87	85	89	88	87	88	85		91.4
	Minimum	62	63	65	62	60	61	61	62	63	60	62	67	62	66	65	67	68	70	70	69	67	68	61	66	67	69	67	67	54	58		64.3
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum																																
	Minimum																																
Hinton§	Maximum	94	88	87	87	84	88	88	82	89	90	92	86	86	90	87	86	88	89	91	92	86	86	82	65	75	85	83	83	79	81		85.6
	Minimum	56	60	61	61	62	62	57	58	58	58	62	64	60	60	64	64	64	63	63	66	65	66	62	63	62	63	65	65	52	51		61.2
Holcomb§	Maximum	90	90	87	86	76	83	86	85	85	85	88	85	85	88	87	85	85	88	89	86	83	80	79	66	74	83	78	76	80	84		83.4
	Minimum	52	54	56	54	56	52	48	54	49	54	56	56	55	56	58	60	55	54	59	58	58	60	55	62	60	63	63	62	44	43		55.5
Huntington§	Maximum	98	95	90	86	87	90	90	83	93	97	97	94	95	90	85	88	91	96	98	95	84	90	74	75	72	87	70	72	89	90		88.0
	Minimum	65	67	68	66	69	66	62	60	61	63	67	68	66	65	69	68	69	67	70	70	70	67	64	65	69	69	70	65	57	60		66.1
Lewisburg	Maximum	88	84	83	82	73	82	82	77	84	86	85	82	82	83	83	80	84	84	87	87	82	81	77	67	75	84	78	79	74	75		81.0
	Minimum	55	58	60	58	63	59	52	53	52	58	58	58	55	59	60	62	62	60	62	62	61	61	60	61	59	64	62	61	48	47		58.3
Marlinton	Maximum	82	82	80	82	70	78	80	74	80	78	78	76	78	80	78	76	80	80	84	78	76	78	72	64	66	76	78	74	70	72		76.7
	Minimum	52	54	54	56	60	56	58	54	48	54	58	56	56	62	60	56	56	58	60	58	56	56	54	56	56	60	58	54	42	40		55.3
Point Pleasant	Maximum	96	93	91	91	87	86	85	83	88	94	93	91	92	95	88	87	88	92	94	94	89	86	80	75	87	85	86	81	82	84		88.1
	Minimum	63	64	64	62	67	65	60	59	59	64	65	65	65	65	74	70	65	65	68	70	67	60	55	68	67	70	65	63	53	52		64.0
Powellton	Maximum																																
	Minimum																																
Robertsburg§	Maximum	96	95	92	90	96	85	86	79	90	93	93	91	91	91	86	86	90	96	93	92	90	88	80	73	86	87	83	83	86	87		88.5
	Minimum	62	65	63	60	66	63	66	57	59	61	63	64	63	64	64	64	66	64	67	69	67	62	58	63	66	68	68	64	55	53		63.1
Ryan	Maximum	91	91	89	88	87	87	86	78	88	89	91	91	91	89	86	84	87	90	90	90	84	85	80	75	83	83	82	79	80	81		85.8
	Minimum	59	60	60	58	63	58	59	55	54	59	61	60	61	63	64	63	62	60	64	66	63	64	69	65	65	67	64	63	50	49		60.9
Spencer§	Maximum	92	92	90	89	85	85	77	81	88	90	92	91	89	91	85	90	90	90	90	91	84	84	84	72	86	84	82	78	82	82		86.2
	Minimum	62	63	63	61	71	57	57	58	57	60	63	62	64	64	65	65	64	64	67	69	67	57	57	59	65	66	68	65	51	53		62.1
Sutton	Maximum	96	96	95	95	94	87	88	88	90	92	97	97	92	92	91	89	90	93	93	93	92	91	91	87	84	86	88	88	87	85		90.9
	Minimum	59	57	60	60	64	57	54	55	55	59	59	62	59	62	48	62	61	60	64	64	62	63	54	62	62	64	65	64	52	49		59.3
Union§	Maximum	89	92	84	85	82	83	85	84	87	87	86	85	83	86	88	87	86	87	87	89	86	83	80	71	76	81	88	80	79	75		84.0
	Minimum	47	56	61	56	62	53	52	51	57	51	59	58	54	57	58	62	59	60	60	59	62	60	60	60	59	63	62	61	60	55		57.8
White Sulphur Spgs.	Maximum																																
	Minimum																																
Williamson§	Maximum	90	90	88	86	85	85	86	80	85	92	91	92	86	88	82	86	86	90	91	87	90	88	78	72	80	86	82	78	81	81		85.4
	Minimum	63	64	67	63	64	65	60	60	62	65	67	67	64	65	67	65	68	66	68	68	70	69	65	68	67	70	70	69	60	55		65.4

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.
Based on 850 records.

YWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

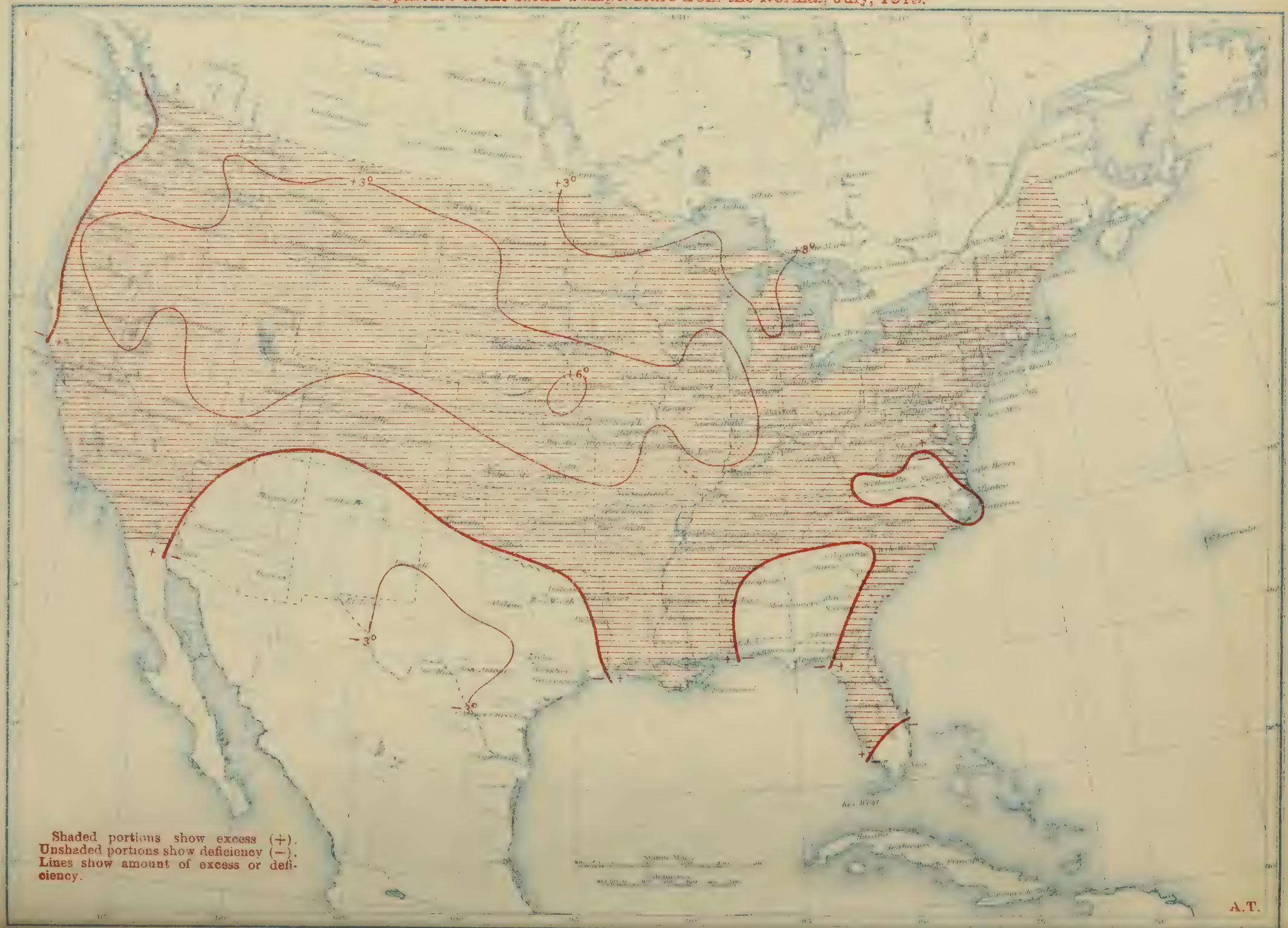
WEST VIRGINIA SECTION

JULY, 1919

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
AUGUST 26, 1919

Departure of the Mean Temperature from the Normal, July, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

A.T.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVII. PARKERSBURG, W. VA., JULY, 1919. No. 7

GENERAL SUMMARY.

July averaged considerably warmer and wetter than usual and the rainfall was unfavorably distributed over the State and throughout the month. With the exception of five or six days, when the temperature averaged from 2° to 6° below the normal, the month was continuously warm. Heavy to excessive rains from the 10th to the 16th and on the 20th caused considerable damage to crops in localities of the central and southern counties. A crest stage of 24 feet was reached in the Little Kanawha River at Glenville and the West Fork River reached a high stage, causing considerable loss to crops. Hail also caused some damage. The condition was droughty over the western counties during the last decade, causing severe damage to potatoes. The weather was favorable, however, for the harvesting of grain and hay. The condition of wheat was somewhat below expectations in many localities, as the heads were not well filled out. The month closed with corn in good condition and growing rapidly.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.04 and 30.03 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.35 inches on the 1st, and 29.73 inches on the 10th. Elkins, 30.34 inches on the 1st, and 29.72 inches on the 10th.

TEMPERATURE.

The monthly mean for the State, 43 stations reporting, was 74.3°. The departure from the normal for 40 stations having ten or more years of record was +1.0°. The temperatures were above the normal from the 2d to the 10th, 13th to the 15th, and the 26th to the 29th, with the highest readings occurring from the 3d to the 5th. The lowest temperatures were noted on the 1st and 12th. The averages were also somewhat below the normal on the 11-12th, 16-17th, and 30th-31st.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 75 per cent; 8 p. m., 60 per cent. The July averages for the same hours for the past 31 years are 80 and 68 per cent, respectively. Elkins, 8 a. m., 87 per cent; 8 p. m., 76 per cent. The July averages for Elkins for the same hours for the past 19 years are 87 and 78 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, deduced from 62 stations, was 5.51 inches. The departure from the normal for 43 stations having ten or more years of record was +0.92 inch. Rain occurred generally on the 6-7th and in many localities daily from the 10th to the 16th and the 18th to the 22d, the amounts being heavy to excessive at many stations on the 10th, 11th, 13th, 14th, 15th, 16th, and 20th. There were also scattered showers on the 28th, 29th, and 31st.

HAIL.

Light hail fell in portions of Brooke, Marion, and Pleasants counties on the 10th, Marion County on the 11th, Roane and Wirt counties on the 12th, Pocahonoas County on the 6th, 14th, and 26th, and Brooke County on the 28th. A severe hail storm occurred in the western portion of Wood County on the 12th. While hail fell in many sections of the county, the path of the storm was only about a mile in width and extended over a northwesterly course over Washington Bottom and Lubeck District for two or three miles, where much damage resulted to crops. The stones were irregular in shape and some were about two inches in length. Every pane of glass was broken on the northwest side of the power house at Dam 19, O. R.

WIND.

The average wind velocity at Parkersburg was 4.5 miles per hour, or normal, as compared with the July average for the past 29 years. The average at Elkins was 3.7 miles per hour, or 0.7 mile above the July average for 20 years. The highest velocity at Parkersburg was 27 miles per hour from the northwest on the 12th, and at Elkins 24 miles per hour from the northwest on the 15th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 65 per cent of the possible amount, or 4 per cent above the July average for 22 years. The average at Elkins was 58 per cent, or 4 per cent above the July average for 19 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 3d, 4th, 12th, 13th, 17th, 18th, 20th, 24th, 25th, 26th, and 30th; Creston, 1st, 5th, 20th, 22d, 24th, 25th, and 30th; Elkins, 1st, 2d, 3d, 4th, 12th, 14th, 17th, 20th, 23d, 24th, 25th, and 30th; Hinton, 12th, 20th, and 24th; Kayford, 7th and 17th; Mannington, 3d, 6th, 11th, 12th, 17th, 22d, 24th, 25th, and 26th; Marlinton, 1st, 2d, 3d, 4th, 5th, 7th, 12th, 24th, 25th, 29th, and 30th; New Cumberland, 1st, 2d, 3d, 4th, 12th, and 30th; Pickens, 23d; Romney, 1st, 14th, 17th, 21st, 22d, and 23d; Rowlesburg, 1st, 2d, 3d, 4th, 5th, 6th, 7th, 12th, 17th, 20th, 22d, 23d, 24th, 25th, 27th, and 30th; St. Marys, 1st, 2d, 22d, and 24th; Smithfield, 17th and 18th; Wheeling, 2d and 3d; Williamson, 23d, 24th, and 25th.

Thunderstorms (dates and number of stations reporting): 6th, 12; 9th, 3; 10th, 16; 11th, 4; 12th, 4; 13th, 9; 14th, 10; 15th, 14; 16th, 3; 18th, 2; 19th, 5; 20th, 5; 21st, 3; 22d, 4; 24th, 1; 26th, 1; 28th, 6; 29th, 1; 31st, 8.

COMPARATIVE DATA FOR JULY.

Year.	Temperature.					Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	67.5	.....	.....	5.59	....	....	...	..	..	..
1892	73.4	98	41	4.20	....	....	....	..	..	..
1893	73.8	98	42	2.96	6.95	1.37	....	20	10	1
1894	73.3	100	36	2.21	4.84	0.50	....	10	19	2
1895	70.5	99	39	4.35	7.04	1.65	....	11	13	7
1896	73.3	97	46	9.07	15.70	2.91	....	9	12	10
1897	74.2	102	46	5.43	9.92	2.85	....	11	12	8
1898	75.0	103	40	4.46	8.33	1.53	....	12	7	12
1899	73.3	100	33	3.78	7.92	0.20	....	14	10	7
1900	74.7	104	41	4.38	7.88	1.72	....	15	11	5
1901	77.4	104	47	3.16	6.21	0.69	....	14	12	5
1902	74.2	104	45	3.54	8.42	0.96	....	14	12	5
1903	72.5	100	37	3.74	8.30	1.82	....	16	10	5
1904	71.5	97	42	5.28	6.00	1.04	....	14	12	5
1905	73.3	98	43	5.92	10.64	3.00	....	12	11	8
1906	72.4	98	45	4.54	7.40	1.50	....	12	11	8
1907	72.7	98	42	6.66	13.36	1.99	....	12	14	5
1908	74.0	100	41	5.21	9.43	2.08	....	14	13	4
1909	70.2	96	36	4.17	10.50	0.60	....	14	11	6
1910	73.8	98	41	4.92	13.16	0.54	....	13	12	6
1911	73.3	106	40	2.82	6.94	0.40	....	16	12	3
1912	72.0	100	45	7.48	15.22	2.67	....	12	12	7
1913	71.2	103	40	5.80	10.07	2.14	....	15	12	4
1914	73.1	106	38	4.11	7.74	0.98	....	16	10	5
1915	71.9	99	38	4.63	11.31	1.82	....	12	11	8
1916	74.8	102	42	3.49	9.47	1.06	....	16	8	7
1917	72.6	104	44	4.83	8.27	1.25	....	14	10	7
1918	70.3	101	38	3.18	6.90	1.04	....	17	7	7
1919	74.3	104	41	5.51	13.08	1.96	....	18	7	6
Means and extremes ..	73.0	106	33	4.60	15.70	0.20	....	14	11	6

Climatological Data for July, 1919.

Stations.	Counties.	Elevation, Feet.	Length of record, years	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	No. of days. Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Panhandle Division.																				
Bayard	Grant	2,700	18																	G. C. Dixon.
Brandywine	Pendleton		3	72.4		95	5	43	1	43	5.17		1.02	0	13	14	8	9	s.	Elmer Keister.
Burlington	Mineral	875	25	72.8	0	97	5	43	12	40	5.13	+1.52	1.00	0	8	12	16	3	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	30								6.15	+2.82	2.00	0	9				e.	S. W. Lightner.
Martinsburg	Berkeley	435	27	75.8	+ 0.2	100	4†	53	1	38	3.07	−0.88	0.93	0	9	19	6	6	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	23	76.8	+ 2.9	102	4†	47	1	50	3.54	+0.07	0.86	0	10	28	1	2		M. S. Henkel.
Piedmont	Mineral	919	6	73.3		98	4	41	12	43	6.38		1.10	0	14					C. A. Sater, Jr.
Romney	Hampshire	824	21	75.4	+ 0.2	102	4	46	1	44	5.03	+1.51	1.61	0	10	13	14	4		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	20	71.0[a]	+ 1.4	97[a]	4†	42[a]	1†	50[a]	4.50	+0.80	0.90	0	9	16	4	11	w.	J. M. Mallow.
Wardensville	Hardy	1,200	1																	Luther F. Sutton.
Averages and	extremes			73.9	+ 0.9	102	4†	41	12	50	4.91	+0.97	2.00	0	10	17	8	6	w.	
Northern Division.																				
Bens Run	Pleasants	622	17	76.6	+ 1.3	97	3†	54	12	35	5.88	+1.27	1.82	0	10	26	3	2		J. D. Riggs.
Brandonville	Preston	1,809	8								5.08		1.40	0	8					W. H. Miller.
Buckhannon	Upshur	1,411	22	72.4	0	93	4	50	12†	35	5.76	+0.46	1.85	0	8	20	6	5		H. A. Darnall.
Cortland	Tucker	3,300	3								6.94		1.66	0	10					Samuel Harmon.
Creston	Wirt	701	17	76.1	+ 1.3	100	4	51	12	41	4.93	+1.13	2.10	0	8	23	2	6	sw.	J. M. Reed.
Davis	Tucker	3,093	10								5.85		2.00	0	9	29	0	2	w.	Branson Harper.
Elizabeth	Wirt	646	7								4.70		2.30	0	7					E. D. Ball.
Elkins	Randolph	1,947	18	70.5	0	91	4	45	12	29	8.75	+4.11	2.59	0	15	11	7	13	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	13	76.2	+ 1.7	101	4†	52	1	42	4.55	−0.28	1.28	0	10	21	3	7	w.	F. P. Hall.
Glenville	Gilmer	738	25	77.8	+ 3.0	101	5	52	12	40	4.08	−1.59	1.90	0	9	24	7	0	w.	Howard R. Brannon.
Grafton	Taylor	1,000	26	75.1	+ 2.2	100	4	49	12	42	2.47	−2.46	0.87	0	5	23	3	4	e.	W. C. Byers.
Lost Creek	Harrison	1,026	21	72.5	0	96	4	48	12	39	6.45	+1.73	1.40	0	8	22	5	4	w.	Allen Smith.
Mannington	Marion	974	16	72.6	0	93	4	49	1†	36	7.75	+3.10	1.77	0	11	16	10	5	sw.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	26	75.6[b]	+ 2.0	97[b]	4†	53[b]	11†	37[c]	4.81	−0.34	1.80	0	9	13[b]	10[b]	6[c]		Prof. E. L. Andrews.
Moundsville	Marshall	642	16	75.8[a]	+ 1.3	100[a]	3	51	11	39[a]	4.82	+0.30	2.00	0	8	16[a]	12[a]	2[a]	sw.	M. Z. White.
New Cumberland	Hancock	987	21	73.0	0	96	3†	49	1†	39	5.70	+1.21	3.31	0	8	19	12	0	sw.	M. F. Smith.
New Martinsville	Wetzel	634	25	76.9	+ 1.3	100	4	54	12	38	4.28	−0.35	1.18	0	10	26	3	2	s.	Wm. Ankrom.
Parkersburg	Wood	638	32	77.2	+ 1.7	97	3	56	12	33	3.30	−1.36	1.05	0	10	13	8	10	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	19	70.0	− 0.4	93	4‡	43	1	44	5.10	−0.10	3.00	0	4	18	7	6		J. W. Swisher.
Philippi	Barbour	1,149	22																	Attie G. Robinson.
Pickens	Randolph	2,697	16	70.9[b]	+ 2.1	92[b]	4	45[b]	1	41[b]	8.09	+1.82	2.09	0	11	17[a]	9[a]	4[a]	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	32								5.94	+1.14	1.15	0	8				e.	J. F. Pierce.
Saint Marys	Pleasants	577	10								4.88	+0.92	1.68	0	9				sw.	Wm. Hughes.
Smithfield	Wetzel	835	13	72.3	− 0.1	94	4	49	12	39	5.55	+0.18	1.35	0	11	28	2	1	sw.	G. M. Whisler.
Terra Alta	Preston	2,612	18	69.6	0	91	4†	47	12	38	4.83	−0.91	1.59	0	11	13	7	11	w.	W. J. Grimm.
Wellsburg	Brooke	1,225	18	74.4	2.5	100	1	47	1	46	6.58	+2.00	3.23	0	11	19	7	5		George P. Pfister.
Weston	Lewis	1,026	23	74.8	+ 0.1	95	4	50	1	37	4.80	−0.28	1.60	0	12	13	16	2		Weston State Hospital.
Wheeling	Ohio	645	32	77.2	+ 3.0	104	4	53	11†	43	6.17	+1.59	3.87	0	8	17	11	3	w.	Miss M. B. Forsyth.
Averages and	extremes			74.2	+ 1.1	104	4	43	1	46	5.48	+0.59	3.87	0	9	19	7	5	w.	
Southern Division.																				
Bancroft	Putnam	574	15	71.6	− 1.0	92	3†	53	1	35	2.85	−1.50	1.50	0	8	24	2	5	nw	R. E. Dent.
Beckley	Raleigh	2,440	19	73.0	+ 1.5	92	14	48	1†	37	10.25	+6.10	3.50	0	11	17	10	4	w.	John A. Ewart.
Bluefield	Mercer	2,558	24	72.8	+ 0.9	90	3†	50	10	35	7.65	+3.16	3.00	0	11	12	18	1		Norfolk & Western Ry.
Breading	Mingo	507	2																	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	4								13.08		2.30	0	11	8	4	17	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	16	78.2	+ 1.7	98	4†	55	12	40	3.93	−0.20	1.53	0	4	23	1	7	e.	C. V. Lewis.
Clay	Clay	706	3								5.06		2.40	0	7					Prof. E. H. Knabenshue.
Cuba	Jackson	650	17	75.2	+ 1.7	95	4	52	12	37	3.90	−0.23	1.50	0	6	13	16	2	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	3								2.89		1.26	0	9					Lockmaster.
Dam 20 O. R.	Wood	551	3								1.96		0.41	0	9					Lockmaster.
Dam 22 O. R.	Jackson	538	4								3.02		0.88	0	8					Lockmaster.
Dam 26 O. R.	Mason	505	3								3.34		0.85	0	7					U. S. Engineer Office.
Elkhorn	McDowell	1,933	26																	J. J. Lincoln.
Evans	Jackson	606	7	75.0		91	5	56	1	30	5.91		2.28	0	6	20	5	6		B. F. Sayre.
Gary	McDowell	1,426	3								6.92		1.69	0	12					U. S. Coal & Coke Co.
Green Sulphur Spgs.	Summers	1,600	23																	W. H. Gwinn.
Hinton	..do	1,450	22	74.5	0	94	4†	50	1	41	8.26	+4.55	1.60	0	15	13	0	18	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	7			95	4				5.71		1.07	0	10	11	13	7		W. C. Williams.
Huntington	Cabell	538	25	79.2	+ 2.5	100	14	58	1†	39	4.22	−0.15	2.52	0	10	18	2	11	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	0								4.89		1.25	0	6					J. O. Brown
Kayford	Kanawha	1,335	3								5.36		1.50	0	13					Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	19	71.7	+ 0.4	92	4	47	1	35	7.59	+3.76	2.52	0	13	20	8	3	s.	Geo. T. Argabate.
Logan	Logan	687	16																	Agent C. & O. Ry.
Madison	Boone	704	13																	S. E. Bradley.
Marlinton	Pocahontas	2,131	20	67.5	− 1.3	88	3	14	1	36	9.20	+4.11	2.01	0	17	5	16	10	sw.	S. L. Brown.
Point Pleasant	Mason	553	26	77.2	+ 0.6	98	3†	53	1†	39	5.74	+1.72	1.96	0	12	17	7	7		W. D. Holmes.
Powellton	Fayette	933	23																	J. F. Campbell.
Raleigh	Raleigh	2,130	3								6.54		2.85	0	13					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	3								9.66		2.00	0	9				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	19	76.4	+ 0.7	96	3	53	12	40	3.03	−0.84	1.24	0	6	15	5	11	n.	E. C. Brace, Jr.
Ryan	Roane	709	16	75.2	+ 1.8	93	4†	50	12	42	5.02	+0.22	1.64	0	9	18	8	5		Wm. E. Ryan.
Sissonville	Kanawha	625	3																	J. N. Johnson.
Spencer	Roane	784	15	76.7	+ 2.9	96	25†	49	1	41	6.43	+1.98	2.55	0	7	15	9	7		A. M. McKown.
Sutton[e*]	Braxton	839	13	73.2	− 3.6	101	14	51	12	41	9.55	+4.67	3.00	0	8	17	6	7		Lawrence Freeman.
Union	Monroe	2,250	15	73.7	+ 2.7	100	6	50	1†	50	5.35	+0.82	1.25	0	9					Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	9																	J. M. Ayres.
Williamson	Mingo	660	19	77.1	+ 1.2	93	4†	55	1	34	3.28	−1.32	1.31	0	9	17	9	5	w.	J. F. Keyser.
Averages and	extremes			74.8	+ 1.0	100	6†	44	1	50	5.73	+1.44	3.50	0	10	16	8	7	w.	
State averages and	extremes			74.3	+ 1.0	104	4	41	12	50	5.51	+0.92	3.87	0	10	18	7	6	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

* Approximated by the observer.

Daily Precipitation for July, 1919.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac																																
Brandywine	do						.87				.75			.30	.50	.37	.45		.32	1.02	.20	.15	T.	.20				.12				.22	5.47
Burlington	do						.35				.52					1.00	.98		.45	T.	.80	T.	.83							.20			5.13
Harpers Ferry ‖	do						T.					1.35			.85	.40	.80		.20	.35		2.00	.10	.10								6.15
Martinsburg	do						.31				.93				T.	.36	.57		.15	.18	*	.37									.20	3.07
Moorefield	do						.18				.31	.33				.49	.86		.07	.15	.48		.52								.15	3.54
Piedmont	do						.17				.81	.02		.02		.95	.47			1.10	.95	.18	.26		.15				.60	.68	.02	6.38
Romney	do					T.	1.10				.71				.05		1.61		.61	.23	.11	.23	.10					.28			T.	5.03
Upper Tract	do						.35				.45				.20	.50	.60		.20	.80		.50	T.				.90				T.	4.50
Wardensville ‖	do																																
Northern Division.																																	
Bens Run	Ohio						.25				.26	.39	.06	.85	1.38	.47	.10			1.82											.30	5.88
Brandonville ‖	Monongahela							.40			.70	.40				1.40	1.38			T.	.10		.60	.10			T.	T.			T.		5.08
Buckhannon	do						.25				.35	1.85		.55	.35	.78				1.00	.63			T.							T.	5.76
Central Station	Middle Is. Creek																																
Cortland ‖	Monongahela							.50				1.66	.98		.20	1.00					.53	.80	.44							.70	.13	6.94
Creston	Little Kanawha						.43	.15			.69	.16		2.10	.64		.46				.30											4.93
Davis ‖	Monongahela												2.00	.35		.75	1.25		.10	.15	.20	.15	.90									5.85
Elizabeth ‖	Little Kanawha							.65			.75	.07		2.30	.23		.20				.50												4.70
Elkins ***	Monongahela						.03	.01			2.52		.17	1.31	.55	.95	1.68		.40	.25	.42	.10	.04						.04			.28	8.75
Fairmont ‖	do						.03	1.25			.54	.70		.09		.53	.52				.03	T.	.23							.63			4.55
Glenville ‖	Little Kanawha							.08			.25			1.90	.66	.36	.30				.40	.09	.03										4.08
Grafton	Monongahela						.13				.47	.82	.18			.87	T.			T.	T.	T.	T.	T.	T.							T.	2.47
Lost Creek	do						.10				1.40	.80	.30	T.	1.11	.95				1.21	T.	T.									.58	6.45
Mannington	do						.84				1.30	1.15		.18	T.	1.75	.04			.12	1.65		.40							.29	.03	7.75
Morgantown	do						.26				1.00	.20		T.		1.80	.12				.52	T.	.18	.66					.07		T.	4.81
Moundsville ‖	Ohio								.80	.60					.30	.75				2.00	.10								.17		.10	4.82
New Cumberland	do						.02				.68	.13	T.	T.	.33	3.31	.03			T.	.44	T.							T.		.76	5.70
New Martinsville	do										1.18	.60		.22	.40	1.10	.05			.10	.05									.40	.18	4.28
Parkersburg ***	Ohio					T.	.05				.22		.90	.15	.12	.92				.18		.02	.08									.66	3.30
Parsons	Monongahela															3.00				.75	T.								.35		1.00	5.10
Philippi	do																																
Pickens	do					.09						.66		2.00	.77	1.30	1.94		.17	.56	.33			.07				.20			T.	8.09
Rowlesburg ‖	do										.42	1.15		.83		.92	.84				.78	.18										5.94
Saint Marys ‖	Ohio										.12	.30		1.68	.53	.15	1.38	T.		.08	.58	.06		T.						.82		4.88
Smithfield ‖	Fishing Creek						.49			T.	1.00	1.35		.39	.46	.45	.13				.86	.13	.21								.08		5.55
Terra Alta	Monongahela						.61				1.10	.05		.02		1.59	.47			.42	.26	.02									.07	.22	4 83
Wellsburg	Ohio						.03				1.07	.02	T.	.04	T.	3.23	.52			.06	.59	.02							.63			.37	6.58
Weston	Monongahela						.10				.70	1.60		.55	1.00	.20	.10			.20	.10	.10							.05			.10	4.80
Wheeling ‖	Ohio							.06			.73	.13		T.		.37	.87			3.87	.05	.09									T.		6.17
Southern Division.																																	
Bancroft ‖	Great Kanawha							.10			.05	.10		1.50	.20	.14	.33				.45												2.85
Beckley	do						.22	1.00	.35		.01	3.50	.52	.18		.81							.95								.75	1.98	10.25
Bluefield	do						.38							1.80	.55	1.30	.08		.05	.30	3.00	.10	.04						.05				7.65
Breading	do																																
Camden-on-Gauley ‖	do						.80					1.00		2.00	2.30	2.00	.80	.82	1.00	.80	.80	.76											13.08
Charleston ‖	do										T.	.45		1.50	.45		1.53			T.												3.93
Clay ‖	do										T.	.14		2.40	.40	T.	1.76	.05			.16	.15											5.06
Cuba	Sand Creek										1.20			.65	T.	.21	.19			.15		T.											3.90
Dam 19 O. R. ‖	Ohio							.01			.15	.24		1.26	.63	.11	.27				.20			.02									2.89
Dam 20 O. R. ‖	do							.41			.11	.06		.20	.30	.07	.35				.40			.06									1.96
Dam 22 O. R. ‖	do							.11			.88	.11		.60	.38		.50				.38	.06											3.02
Dam 26 O. R ‖	do										.60	.36		.85	.67		.19			T.	.62			.05									3.34
Elkhorn	Big Sandy																																
Evans	Ohio										2.28			2.02		.13	.65			.27												.56	5.91
Gary ‖	Big Sandy							.56	1.02		.20	.18			.80	.13	.20	1.69		.14		1.54	.36								.10		6.92
Green Sulpr. Spgs.	Great Kanawha																																
Hinton ‖	do							.20	.26		.02	.36		1.22	.96	.06	.08	1.36		1.69	.38	.36	1.02	.10						T.	.28		8.26
Holcomb	do									.23	.09			1.07	.63	1.01	.81			.77	.26		.24									.60	5.71
Huntington ‖	Ohio						.40	.12			.06			.88	.10		.06			.02	2.50			.02								.06		4.22
Kanawha Falls ‖	Great Kanawha							.34						.90	.70		1.00	T.	.70		1.25										T.	T.		4.89
Kayford ‖	do					T.	.08	1.30			.22	.13		1.50	.29	.17	.22	.12			.27	.73		.08							.25		5.36
Lewisburg	do						2.52	.21		T.				1.31	.98	.04	.78		.13	.55	.05		.11	.05					.48			.38	7.59
Logan	Guyan lotte																																
Madison	Great Kanawha																																
Marlinton	do						1.34				.04	T.		.40	1.28	.68	.74	.64		.04	2.01	.11	.13	.18	.11		.74	.04	.04	T.		.68	9.20
Point Pleasant ‖	Ohio					.06	.40	.10			.34	.60	.15		1.96		.10	.20			1.67		.06									.10	5.74
Powellton	Great Kanawha																																
Raleigh ‖	do							.12			.20	11		2.85	.62	.12	.55	.41		.18	.97	.32		.04					.05			6.54
Renick	do							1.90						1.55	T.	.32	2.00	.55		1.80	.30			.80					.44			9.66
Robertsburg ‖	do										.31	.15		.75	.45		.13			1.24												3.03
Ryan	do						.05				.11		T.	1.64	.24	.47	.56			1.34									.01		.60	5.02
Sissonville ‖	do																																
Spencer ‖	Little Kanawha							17			.95		2.55		.30	.04	1.52				.90												6.43
Sutton	Great Kanawha						1.75							1.30	1.20	.50	3.00	1.30		.20	.30												9.55
Union	do						.75	1.25				.30		.80			.90	.04		1.10	.04		.17										5.35
White Sulphur Spgs.	do																																
Williamson ‖	Big Sandy							.04				1.31		.05	T.		.65	.02	.20	.06	.20		.75							T.			3.28

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for July, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum																																
	Minimum																																
Brandywine	Maximum	86	89	91	93	95	90	87	89	82	85	83	85	85	90	89	82	78	83	78	84	85	86	85	89	88	90	91	89	89	85	86	86.3
	Minimum	43	48	57	55	57	59	60	55	56	58	50	46	64	60	66	67	60	62	65	65	64	66	63	55	56	61	62	64	62	50	59	58.5
Burlington	Maximum	85	92	95	96	97	88	80	81	82	83	75	83	85	88	87	80	81	78	78	83	85	87	84	87	84	89	90	90	85	82	79	85.1
	Minimum	45	53	58	59	61	58	66	60	54	60	56	43	65	65	66	66	58	63	68	65	67	67	62	56	62	59	59	68	65	53	62	60.4
Martinsburg§	Maximum	90	94	95	100	100	92	80	84	84	81	77	85	85	67	88	79	83	82	82	85	87	88	88	90	87	94	96	95	89	85	79	87.5
	Minimum	53	56	62	65	67	70	67	62	61	65	59	54	54	67	69	69	63	64	70	70	70	71	66	61	61	63	65	73	73	60	61	64.2
Moorefield	Maximum	92	102	100	102	102	99	83	87	86	88	87	89	92	92	92	87	85	85	80	89	90	92	88	92	90	98	98	97	93	87	85	91.3
	Minimum	47	52	52	61	59	66	67	55	58	65	59	50	67	64	68	69	61	65	66	65	67	69	65	67	61	62	65	68	81	52	62	62.4
Piedmont	Maximum	87	90	91	98	96	90	80	77	83	79	73	81	83	89	85	76	78	76	83	81	86	84	89	93	89	93	95	93	89	81	80	85.6
	Minimum	48	54	60	61	59	66	66	53	55	61	53	41	64	65	66	66	62	68	67	68	67	68	65	55	62	57	65	69	69	52	60	61.0
Romney	Maximum	90	95	100	102	101	93	83	85	86	82	84	87	88	91	91	84	85	85	80	84	91	91	89	93	88	95	95	94	88	86	82	89.2
	Minimum	46	52	76	62	59	65	66	60	55	58	57	48	65	66	68	69	58	65	62	64	67	66	62	56	58	60	65	71	70	52	61	61.6
Upper Tract	Maximum	90	92	93	97	97	90	89	82	80	83	85	86	....	90	90	78	78	79	79	80	87	86	87	89	89	90	88	88	87	87	86	86.8
	Minimum	42	42	50	56	58	60	62	54	54	53	53	53	....	46	46	66	60	57	57	58	60	60	56	55	55	56	57	65	65	50	49	55.1
Wardensville§	Maximum																																
	Minimum																																
Northern Division.																																	
Bens Run	Maximum	92	94	97	97	95	87	85	91	85	85	81	88	86	90	88	82	86	83	76	85	86	89	88	88	88	91	92	91	87	88	80	87.9
	Minimum	57	62	61	65	66	68	69	59	65	70	56	54	67	68	71	65	58	65	69	66	68	68	70	61	65	65	70	72	74	58	70	65.3
Buckhannon	Maximum	84	89	90	93	91	87	82	90	83	80	75	85	81	85	85	80	80	82	78	85	85	86	81	84	84	88	88	87	85	80	81	84.3
	Minimum	52	56	62	60	65	68	66	57	61	60	60	50	57	67	69	56	50	61	68	62	54	56	63	56	61	63	66	67	72	53	57	60.5
Creston	Maximum	90	95	98	100	98	90	88	90	86	85	85	92	89	95	90	79	87	88	83	87	89	94	88	90	92	93	93	92	89	91	82	89.9
	Minimum	52	56	60	61	68	61	66	58	68	67	57	51	68	68	71	67	55	62	68	63	67	64	66	55	60	63	65	62	70	54	59	62.3
Elkins	Maximum	85	88	89	91	90	83	82	85	79	78	72	85	79	85	82	73	80	80	78	83	83	84	80	83	84	85	85	83	81	76	78	82.2
	Minimum	47	52	59	57	57	65	62	53	67	60	51	46	64	65	66	59	55	60	64	60	63	65	60	54	57	60	63	68	58	51	54	58.8
Fairmont§	Maximum	91	90	100	101	101	93	88	92	86	83	81	90	87	92	90	85	90	88	83	90	89	95	89	90	91	93	94	93	89	87	83	90.5
	Minimum	52	57	60	62	63	66	67	59	62	67	55	53	54	65	71	67	58	59	66	64	66	66	64	56	61	62	66	70	71	56	57	62.0
Glenville	Maximum	90	97	97	99	101	98	92	94	95	87	84	92	93	93	96	83	90	87	92	89	90	95	95	92	93	95	94	95	95	94	90	92.8
	Minimum	54	59	64	61	65	68	68	60	62	68	57	52	65	68	71	68	57	63	68	62	65	67	64	58	60	64	64	66	71	54	57	62.9
Grafton	Maximum	91	97	98	100	99	91	87	88	84	83	79	91	85	93	90	81	85	82	81	86	91	92	88	91	89	93	93	87	86	88	88	89.1
	Minimum	50	55	61	60	61	68	66	55	61	61	55	49	65	65	68	66	55	59	65	62	64	66	65	56	61	60	64	67	71	52	60	61.1
Lost Creek	Maximum	88	90	93	96	94	89	88	84	82	78	80	86	80	86	87	82	81	82	80	80	84	86	90	89	85	88	89	85	85	83	77	85.4
	Minimum	49	55	57	58	59	66	65	58	54	63	60	48	52	67	69	54	56	60	62	60	65	63	65	60	55	61	62	65	72	52	57	59.6
Mannington	Maximum	85	90	91	93	92	86	83	85	83	79	76	83	82	86	86	77	82	81	81	82	84	86	84	84	83	87	88	89	86	81	78	84.2
	Minimum	49	55	60	59	60	65	65	55	60	66	52	49	66	67	68	64	58	60	66	64	66	64	61	61	56	62	60	64	66	71	53	61.0
Morgantown	Maximum	92	96	96	97	97	92	86	88	....	....	86	86	86	89	89	79	88	86	82	87	86	90	86	87	87	90	90	90	82	84	83	88.2
	Minimum	55	59	64	62	65	68	64	68	65	64	53	53	65	68	67	63	55	64	68	64	67	66	63	58	64	68	69	73	....	54	64	63.0
New Cumberland	Maximum	88	94	96	96	94	88	82	81	89	83	76	80	86	89	83	78	81	81	80	83	80	82	87	88	85	90	90	90	84	84	81	85.5
	Minimum	49	55	61	60	63	65	64	58	60	63	49	49	67	66	67	60	60	40	66	67	67	65	55	58	56	61	72	74	65	52	64	60.5
New Martinsville	Maximum	92	95	99	100	97	93	89	89	89	85	82	84	86	90	87	83	87	89	82	87	87	91	89	90	89	92	93	93	88	88	86	89.4
	Minimum	55	60	63	62	65	70	68	60	62	66	55	54	68	68	70	64	58	63	68	67	67	67	76	60	64	64	68	71	72	57	63	64.4
Parkersburg	Maximum	86	93	97	96	95	88	85	88	85	85	81	89	88	93	90	80	85	86	78	86	86	90	86	91	90	93	94	92	87	86	77	87.9
	Minimum	58	63	64	65	68	71	70	64	70	68	60	56	68	69	70	65	61	67	70	65	70	69	66	60	67	72	73	77	72	61	67	66.6
Parsons	Maximum	87	91	91	93	93	90	90	85	84	72	76	84	80	85	84	80	82	79	75	84	85	86	81	84	85	86	86	85	84	79	77	84.0
	Minimum	43	47	47	55	54	53	50	64	57	53	49	46	61	61	63	56	54	57	63	62	63	62	53	53	53	58	61	70	63	51	56	56.1
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum	86	89	90	92	87	....	85	85	80	....	75	86	80	87	86	75	84	78	78	85	85	86	83	85	86	87	88	84	84	84	83	84.2
	Minimum	45	52	58	56	61	....	55	56	63	....	52	46	62	63	64	63	52	63	60	58	60	59	58	51	56	60	60	64	60	58	53	57.6
Terra Alta	Maximum	88	90	88	91	91	86	80	80	79	70	69	81	77	83	82	73	79	76	73	80	80	84	78	80	82	83	84	83	78	76	86	81.0
	Minimum	50	53	60	60	57	63	58	50	56	58	49	47	62	64	64	60	51	59	63	59	61	64	58	55	59	60	64	69	66	48	59	58.3
Wellsburg	Maximum	93	98	98	100	97	90	90	89	93	87	80	85	87	94	87	82	87	87	81	88	86	90	88	96	85	92	93	92	86	84	80	89.2
	Minimum	47	51	60	57	61	64	67	52	58	63	50	49	65	61	68	61	51	55	65	67	67	64	56	55	56	58	64	67	65	54	64	59.5
Weston	Maximum	87	92	93	95	93	91	86	87	87	81	81	87	86	87	87	79	84	83	91	85	86	89	85	86	88	89	89	88	86	80	87.0
	Minimum	50	58	63	60	62	70	66	58	64	67	57	51	65	68	70	67	56	62	69	62	65	66	57	59	62	64	67	69	72	55	59	62.6
Wheeling§	Maximum	97	101	102	104	101	90	94	94	85	87	84	87	92	97	95	88	92	90	82	87	87	94	96	94	93	95	99	96	93	92	86	92.6
	Minimum	54	60	60	62	64	66	68	60	62	62	53	53	55	67	70	63	54	55	60	68	68	67	60	60	60	64	67	72	70	55	55	61.7
Southern Division.																																	
Beckley	Maximum	84	84	85	89	90	85	84	89	82	81	87	88	82	92	84	79	82	84	84	84	80	85	85	82	85	86	87	87	86	88	87	85.1
	Minimum	48	48	48	64	62	66	61	59	60	61	62	55	53	61	65	67	60	64	66	63	64	63	61	58	59	61	68	66	55	68	68	60.8
Bluefield	Maximum	83	88	90	90	90	90	87	84	79	79	87	86	88	88	88	84	76	78	78	82	84	84	83	84	85	86	87	86	86	81	88	84.9
	Minimum	53	53	58	59	59	60	53	65	65	50	53	56	60	61	69	64	61	64	65	69	62	64	62	60	62	62	68	70	67	62	56	60.7
Charleston	Maximum	90	90	95	98	94	92	94	92	88	87	84	95	88	98	95	81	87	89	91	97	91	93	90	94	95	96	98	93	94	90	92	92.0
	Minimum	58	60	66	66	67	67	68	67	66	69	60	55	61	67	72	65	60	64	65	62	65	67	66	60	61	66	72	70	67	59	60	64.5
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum																																
	Minimum																																
Hinton§	Maximum	86	92	90	94	94	93	88	86	80	80	83	90	84	91	90	75	80	81	76	85	85	83	83	87	88	89	90	88	88	82	90	86.4
	Minimum	50	51	59	63	65	65	67	67	61	61	63	58	58	63	64	68	64	64	67	62	62	63	65	63	62	62	68	68	68	60	59	62.6
Holcomb§	Maximum	89	90	92	95	87	94	82	87	81	78	86	83	88	88	86	83	85	77	84	92	87	85	86	88	88	89	85	84	81	86	77	86.0
	Minimum																																
Huntington§	Maximum	93	95	99	97	97	88	85	93	90	89	87	97	89	100	92	82	88	91	80	84	91	91	92	95	94	98	98	94	95	92	92	91.9
	Minimum	58	60	65	67	70	70	70	66	68	72	63	58	60	68	76	70	60	64	70	66	68	69	66	60	63	68	72	76	75	60	65	66.5
Lewisburg	Maximum	81	87	88	92	90	86	82	83	76	80	75	85	80	84	86	75	76	79	77	81	84	83	84	84	85	86	87	85	83	80	85	82.9
	Minimum	47	52	58	59	59	63	63	65	61	61	60	50	63	63	66	65	61	65	66	61	61	64	62	56	58	62	64	66	67	53	53	60.5
Marlinton	Maximum	80	84	88	86	84	84	78	76	78	72	74	76	78	82	76	72	74	72	72	72	78	78	80	80	82	80	80	78	80	82	82	78.6
	Minimum	44	52	54	54	56	60	58	58	60	56	54	52	58	62	56	58	52	62	60	62	58	60	54	52	58	60	58	54	52	64	50	56.4
Point Pleasant	Maximum	89	94	98	98	98	96	85	91	86	85	83	92	89	95	92	82	87	89	85	85	89	93	88	92	92	94	95	94	94	91	84	90.4
	Minimum	53	58	61	62	67	68	68	59	67	68	55	53	66	71	71	65	55	64	68	63	68	67	62	59	63	70	69	73	74	56	63	64.1
Powellton	Maximum																																
	Minimum																																
Robertsburg§	Maximum	90	94	96	95	94	89	84	93	85	84	83	93	89	95	88	81	88	91	76	85	90	93	86	91	95	94	95	91	89	90	87	89.5
	Minimum	55	59	62	62	67	68	69	62	64	69	58	53	59	57	73	67	58	61	59	64	67	67	64	58	62	65	69	72	73	55	60	63.2
Ryan	Maximum	85	91	92	93	95	95	86	89	90	85	80	92	85	91	84	82	85	88	85	85	86	88	92	88	89	91	92	91	90	91	85	88.2
	Minimum	51	56	58	58	65	65	65	58	69	67	65	50	65	66	69	64	54	63	65	62	62	63	65	63	54	63	65	69	65	65	63	62.3
Spencer§	Maximum	86	91	95	94	94	90	91	90	90	89	93	90	89	95	93	80	88	89	80	88	89	94	90	92	96	95	96	94	91	90	87	90.6
	Minimum	49	57	61	61	65	68	67	64	62	62	52	62	69	69	70	70	56	57	70	64	67	68	66	57	57	64	67	70	74	56	56	62.8
Sutton	Maximum																																
	Minimum																																
Union§	Maximum	85	89	91	89	94	100	95	89	83	82	85	86	85	86	87	84	74	79	79	80	86	85	86	88	90	90	89	91	90	90	91	87.9
	Minimum	50	51	60	60	58	50	50	60	55	59	60	52	63	62	65	65	62	65	65	63	60	63	64	64	65	66	65	66	65	64	65	60.4
White Sulphur Spgs.	Maximum																																
	Minimum																																
Williamson§	Maximum	84	90	90	93	93	90	87	90	84	84	80	90	89	91	89	78	82	86	84	83	87	89	85	88	89	90	92	88	90	87	90	87.5
	Minimum	55	56	60	65	67	67	71	71	70	65	65	60	61	72	75	72	64	64	68	68	69	68	66	68	68	62	72	73	70	70	65	66.7

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.
Based on 850 records.
A. T.

NWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY ... LIBRARY

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

AUGUST, 1919

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
SEPTEMBER 26, 1919

Departure of the Mean Temperature from the Normal, August, 1919.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

Vol. XXVII. Parkersburg, W. Va., August, 1919. No. 8

GENERAL SUMMARY.

August averaged considerably cooler and wetter than usual, with the sunshine slightly above the normal. However, the rainfall was unfavorably distributed over the State, the amounts received over the eastern panhandle and extreme southern counties being insufficient for favorable crop growth. In practically all other localities the ground was kept in good condition and crops, pastures, and meadows made excellent growth. The average temperature for August was lower in only four years of record, 1891, 1907, 1912, and 1915. The yields of wheat, rye, and oats were near the average, and these grains were generally harvested and thrashed under favorable conditions. Potatoes, apples, and peaches were fair to poor, but corn was generally excellent at the close of the month. Pastures and meadows were also good, except in the extreme western and southern counties. Good progress was made in fall plowing.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.00 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.28 inches on the 11th, and 29.82 inches on the 7th. Elkins, 30.30 inches on the 11th, and 29.75 inches on the 7th.

TEMPERATURE.

The monthly mean for the State, deduced from 42 stations, was 70.2°. The departure from the normal for 40 stations having ten or more years of record was —1.7°. The month opened slightly cooler than usual and the temperatures were also somewhat below the normal from the 8th to the 12th, 18th to the 20th, and 25th to the close of the month, with the lowest readings occurring generally on the 27th, 28th, and 29th. Moderately warm weather prevailed from the 5th to the 7th, 15th to the 17th, and 22d to the 24th, and the highest temperatures occurred in most localities from the 5th to the 7th, inclusive.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 80 per cent; 8 p. m., 67 per cent. The August averages for the same hours for the past 31 years are 82 and 70 per cent, respectively. Elkins, 8 a. m., 88 per cent; 8 p. m., 81 per cent. The August averages for Elkins for the same hours for the past 19 years are 89 and 80 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, deduced from 60 stations, was 4.54 inches. The departure from the normal for 43 stations having ten or more years of record was +0.75 inch. The rainfall was heaviest over the northwestern and central counties and lightest over the eastern panhandle and southern counties. Showers occurred in many localities on the 1st and daily from the 4th to the 6th, 12th to the 14th, 16th to the 19th, 21st to the 23d, and on the last two days, the greatest amounts being recorded on the 1st, 6th, 12th, 17-18th, 22d, and 30th-31st.

HAIL.

Light hail fell in sections of Wirt County on the 18th, Pocahontas and Webster counties on the 27th, and Hancock County on the 31st. No damage resulted.

WIND.

The average wind velocity at Parkersburg was 4.9 miles per hour, or 0.7 mile above the August average for 29 years. The The average at Elkins was 4.0 miles per hour, or 0.7 miles above the August average for 20 years. The highest velocity at Parkersburg was 30 miles per hour from the west on the 17th, and at Elkins 26 miles per hour from the west on the 18th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 58 per cent of the possible amount, or 2 per cent above the August average for 22 years. The average at Elkins was 57 per cent, or 5 per cent above the August average for 20 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 3d, 4th, 7th, 9th, 10th, 11th, 13th, 15th, 16th, 20th, 24th, 26th, 27th, 28th, and 29th; Charleston, 11th; Creston, 9th, 10th, 11th, 15th, 16th, 26th, 28th, 29th, and 31st; Elkins, 3d, 7th, 10th, 15th, 16th, 20th, 28th, and 29th; Fairmont, 9th and 11th; Grafton, 27th; Hinton, 7th, 11th, 16th, 24th, and 28th; Holcomb, 7th;; Huntington, 3d; Mannington, 3d, 7th, 8th, 9th, 10th, 11th, 13th, 15th, 19th, 26th, 28th, 29th, and 31st; Marlinton, 2d, 3d, 4th, 5th, 8th, 9th, 10th, 15th, 19th, 20th, 23d, and 28th; New Cumberland, 7th, 9th, 12th, 20th, 28th, and 30th; Parkersburg, 31st; Point Pleasant, 29th; Robertsburg, 15th, 20th, 28th, and 31st; Rowlesburg, 2d, 3d, 7th, 9th, 10th, 11th, 15th, 16th, 18th, 19th, 20th, 21st, 24th, and 31st; Smithfield, 9th, 10th, 11th, 12th, 15th, 16th, 18th, 22d, 28th, 29th, and 30th; St. Marys, 9th, 11th, 15th, 16th, 28th, and 29th; Wheeling, 3d, 4th, 7th, 9th, 10th, 11th, 12th, 16th, 20th, and 28th; Williamson, 4th, 5th, 8th, 9th, 11th, 17th, 18th, 21st, 22d, 23d, 24th, 26th, 27th, 28th, and 29th.

Halo, lunar: Wheeling, 9th.

Smoke: Holcomb, 8th, 9th, 10th, and 11th; Burlington, Mannington and Pickens, 8th; Parkersburg, 8th, 10th, 11th, and 12th.

Thunderstorms (dates and number of stations reporting): 1st, 1; 4th, 1; 5th, 10; 6th, 9; 7th, 2; 11th, 1; 12th, 5; 13th, 2; 14th, 6; 15th, 2; 16th, 6; 17th, 6; 18th, 10; 19th, 1; 21st, 8; 22d, 3; 23d, 5; 24th, 3; 27th, 2; 29th, 1; 30th, 5; 31st, 6.

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	69.8	.....	.....	5.48	....	....	....	..	..	..
1892	72.1	96	41	2.55	....	....	....	..	..	..
1893	70.8	98	41	3.38	....	....	....	..	..	..
1894	71.5	103	38	2.07	5.15	0.27	....	14	12	5
1895	73.3	104	40	3.01	7.69	1.15	....	15	11	5
1896	72.6	97	40	2.82	5.69	0.88	....	15	12	4
1897	70.9	100	42	2.91	5.93	0.77	....	13	14	4
1898	73.7	96	44	7.51	11.57	4.40	....	12	12	7
1899	73.5	100	34	2.64	6.37	0.34	....	15	11	5
1900	76.0	100	45	3.15	7.20	1.03	....	17	10	4
1901	73.6	98	43	5.14	13.70	1.64	....	10	13	8
1902	70.4	98	35	2.40	6.05	0.97	....	15	13	3
1903	71.4	105	38	2.64	5.85	0.99	....	12	13	6
1904	70.7	95	32	2.88	6.71	0.67	....	15	10	6
1905	71.3	96	40	4.25	8.32	1.32	....	14	11	6
1906	75.4	98	47	5.15	10.72	2.18	....	10	13	8
1907	69.4	93	41	4.64	10.12	1.55	....	13	10	8
1908	70.9	101	37	2.82	5.63	0.84	....	15	10	6
1909	70.8	99	37	3.03	5.79	0.81	....	16	10	5
1910	70.8	98	39	2.03	5.58	0.70	....	17	10	4
1911	73.5	105	40	6.71	12.14	2.38	....	13	10	8
1912	69.3	95	35	3.64	11.70	0.25	....	10	13	8
1913	72.7	102	37	3.18	8.20	0.79	....	19	7	5
1914	71.8	100	40	4.86	9.29	1.38	....	15	9	7
1915	69.4	99	36	4.84	8.36	2.46	....	10	11	10
1916	72.9	104	40	4.76	15.35	1.46	....	14	9	8
1917	71.6	102	39	3.53	8.80	0.94	....	17	8	6
1918	76.0	110	43	3.96	9.15	0.63	....	17	8	6
1919	70.2	100	40	4.54	8.67	0.95	....	16	9	6
Means and extremes ..	71.9	110	32	3.81	15.35	0.25	....	14	11	6

Climatological Data for August, 1919.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, melted.	Precipitation .01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	18								2.77		1.00	0	9	22	3	6	sw.	G. C. Dixon.
Brandywine	Pendleton		3	68.4		90	8	40	29	39	2.77		1.00	0	9	22	3	6	sw.	Elmer Keister.
Burlington	Mineral	875	25	69.0	− 2.2	89	5	45	28†	32	3.45	−0.08	1.33	0	6	9	17	5	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	30								2.06	−1.77	1.01	0	5					S. W. Lightner.
Martinsburg	Berkeley	435	27	71.3	− 1.8	93	24	51	28†	31	3.30	−0.50	2.07	0	7	12	8	4	nw.	G. W. Van Metre, C. E.
Moorefield [b]	Hardy	900	23	73.4	+ 0.5	100	5	46	29	38	1.93	−1.22	0.48	0		20	1	2		M. S. Henkel.
Piedmont	Mineral	919	6	69.3		90	5†	46	27	33	2.96		1.10	0	12	17	8	6	nw.	C. A. Suter, Jr.
Romney [d]	Hampshire	824	21	72.2	− 0.6	94	6†	45	29	39	3.73	−0.15	0.92	0		13	11	3	w.	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	20	68.6	− 2.4	92	5†	42	29	42	0.95	−3.07	0.50	0	4	23	3	5	w.	J. M. Mallow.
Wardensville††	Hardy	1,200	1	67.6[a]		92[a]	4	43	26†	36[a]	4.55		1.45	0	9	22	0	9	w.	Luther F. Sutton.
Averages and	extremes			70.3	− 1.3	100	5	40	29	42	2.64	−1.13	2.07	0	7	18	8	5	w.	
Northern Division.																				
Bens Run	Pleasants	622	17	71.2	− 2.5	92	7	50	28	31	8.05	+4.28	2.10	0	14	20	8	3		J. D. Riggs.
Brandonville ††	Preston	1,809	8								5.04		0.96	0	11					W. H. Miller.
Buckhannon	Upshur	1,411	22	69.0	− 1.1	87	7†	45	29	32	5.80	+1.84	1.58	0	12	18	9	4		H. A. Darnall.
Cortland	Tucker	3,300	3								3.98		0.96	0	9					Samuel Harmon.
Creston	Wirt	761	17	71.8	− 1.4	96	7	48	28	38	4.90	+1.76	1.05	0	11	22	2	7	sw.	J. M. Reed.
Davis	Tucker	3,093	10																	Branson Harper.
Elizabeth	Wirt	646	7								3.84		0.95	0	12					E. D. Ball.
Elkins	Randolph	1,947	18	66.4	− 2.0	88	16	45	29	32	3.09	−0.56	0.71	0	15	7	11	13	w.	U. S. Weather Bureau.
Fairmont	Marion	883	13	71.2	− 1.6	94	5†	49	29	39	3.64	+0.17	1.35	0	14	23	4	4	w.	F. P. Hall.
Glenville	Gilmer	738	25	73.6	+ 0.1	96	7	47	26	34	5.22	+1.30	1.30	0	11	20	9	2	w.	Howard R. Brannon.
Grafton	Taylor	1,000	26	71.0	− 0.5	95	7	48	10†	40	5.24	+1.24	2.30	0	10	13	14	4	e.	W. C. Byers.
Lost Creek	Harrison	1,026	21	69.1	− 1.5	89	7†	46	29	38	3.51	−0.60	0.87	0	11	19	7	5	w.	Allen Smith.
Mannington	Marion	974	16	68.2	− 2.7	88	5†	46	28	33	4.82	+1.36	0.98	0	17	13	10	8	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	26	70.9	− 1.3	91	16	49	9[f]	38	6.28	+2.28	1.15	0	11	11[f]	3[f]	11[f]		Prof. E. L. Andrews.
Moundsville	Marshall	642	16	70.4[a]	− 2.3	95[a]	6	47	27†	36[a]	7.35	+4.47	1.45	0	10	16	10	5	sw.	M. Z. White.
New Cumberland	Hancock	987	21	68.8[c]	− 2.0	90[c]	7	46[c]	9[f]	31[c]	6.52	+3.28	1.88	0	12	12[c]	11[c]	5[c]	s.	M. F. Sands.
New Martinsville	Wetzel	634	25	72.1	− 2.0	93	7	49	28	35	7.30	+4.00	2.10	0	14	19	3	9	s.	Wm. Ankrom.
Parkersburg	Wood	638	32	72.4	− 0.7	94	7	50	28	33	4.60	+1.07	1.59	0	13	11	9	11	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	19	67.2	− 1.9	90	16	43	27	35	3.55	−0.23	1.35	0	5	14	9	8		J. W. Swisher.
Philippi	Barbour	1,149	22																	Attie G. Robinson.
Pickens	Randolph	2,697	16	65.8	− 1.1	89	7	42	29	35	8.40	+3.43	1.63	0	16	16	9	6	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	32								3.62	−0.14	0.72	0	15				w.	J. F. Pierce.
Saint Marys	Pleasants	577	10								6.10	+1.27	1.75	0	13				sw.	Wm. Hughes.
Smithfield	Wetzel	835	13	67.2	− 4.0	88	7	47	28	35	6.07	+1.83	1.30	0	15	21	8	2	sw.	G. M. Whisler.
Terra Alta	Preston	2,612	18	65.0	− 3.0	85	16	44	3	34	5.31	+0.45	1.27	0	17	13	10	8	w.	W. J. Grimm.
Wellsburg [i]	Brooke	1,225	18	70.5	− 0.5	92	5†	46	10	37	6.16	+2.60	1.74	0		9	9	4	w.	George P. Pfister.
Weston	Lewis	1,026	23	71.4	− 1.6	90	5†	49	29	34	5.25	+1.35	1.40	0	12	15	11	5		Weston State Hospital.
Wheeling	Ohio	645	32	72.0	− 1.2	97	5	47	28†	39	7.10	+3.64	1.62	0	15	15	8	8	sw.	Miss M. B. Forsyth.
Averages and	extremes			69.8	− 1.7	97	5	42	29	40	5.43	+1.74	2.30	0	13	16	9	6	w.	
Southern Division.																				
Bancroft	Putnam	574	15	70.8[f]	− 4.8	92[f]	7	50	4†	37[f]	4.86	+0.26	1.43	0	11	25	2	4	nw	R. E. Dent.
Beckley	Raleigh	2,440	19	70.2	+ 0.6	87	4†	46	28	36	1.97	−1.12	1.01	0	4	21	6	4	w.	John A. Ewart.
Bluefield	Mercer	2,558	24	67.8	− 3.5	87	1†	46	13	38	3.86	−0.49	1.25	0	10	17	11	3		Norfolk & Western Ry.
Breading	Mingo	507	2																	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	4								8.67		2.00	0	9				s.	Miss Katie Jarvis.
Charleston	Kanawha	597	16	74.7	− 0.8	100	7	52	30	37	6.26	+1.94	2.00	0	12	13	3	15	w.	C. V. Lewis.
Clay	Clay	706	3								5.06		1.20	0	10					Prof. E. H. Knabenshue.
Cuba	Jackson	650	17	71.7	− 0.3	96	5	46	29	40	2.22	−0.81	0.60	0	12	14	15	2	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	3								5.61		1.99	0	12					Lockmaster.
Dam 20 O. R.	Wood	551	3								4.28		1.38	0	16					Lockmaster.
Dam 22 O. R.	Jackson	538	4								3.99		1.20	0	8					Lockmaster.
Dam 26 O. R.	Mason	505	3								2.88		0.95	0	8					U. S. Engineer Office.
Elkhorn	McDowell	1,933	26																	J. J. Lincoln.
Evans	Jackson	606	7																	B. F. Sayre.
Gary	McDowell	1,426	3								3.82		1.43	0	11					U. S. Coal & Coke Co.
Gassaway	Braxton										3.87			0	9					W. H. Gunn.
Green Sulphur Spgs.	Summers	1,600	23																	H. A. Hays.
Hinton	..do	1,450	22	70.8	− 3.2	91	5†	51	27†	30	4.64	+0.88	1.60	0	13	14	1	16	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	7			89	7				5.97		1.40	0	12	14	11	6		W. C. Williams.
Huntington	Cabell	538	25	74.3	− 0.3	97	7	52	29	36	2.88	−0.89	0.84	0	13	18	2	11	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	0								5.61		1.75	0	9					J. O. Brown.
Kayford	Kanawha	1,335	3								5.64			0	11					Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	19	67.8	− 2.2	88	5†	43	27	31	3.30	−0.20	1.17	0	13	17	9	5	nw.	Geo. T. Argabate.
Logan	Logan	687	16																	Agent C. & O. Ry.
Madison	Boone	704	13																	S. E. Bradley.
Marlinton	Pocahontas	2,131	20	63.6	− 4.1	88	5	42	26†	30	4.58	+0.17	0.78	0	12	2	21	5	sw.	S. L. Brown.
Point Pleasant	Mason	553	26	74.0	− 0.7	96	7	49	10†	40	2.63	−0.63	0.48	0	12	13	7	11		W. D. Holmes.
Powellton	Fayette	933	23																	Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	3								4.30		2.01	0	8					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	3								3.93		1.30	0	6					Wm. B. Hill.
Robertsburg	Putnam	574	19	72.2	− 2.2	97	7	49	26†	39	2.70	−0.67	0.68	0	8	15	1	15	s.	E. C. Brace, Jr.
Ryan	Roane	700	16	71.0	− 1.0	94	5	47	29	38	4.24	+0.30	0.68	0	14	16	10	5		Wm. E. Ryan.
Sissonville	Kanawha	625	3																	J. N. Johnson.
Spencer	Roane	784	15																	A. M. McKown.
Sutton [g] *	Braxton	839	13																	Lawrence Freeman.
Union	Monroe	2,250	15	70.0	− 0.7	89	1†	42	27	36	2.66	−1.19	0.96	0	5					Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	9																	J. M. Ayres.
Williamson	Mingo	660	19	72.5	− 2.6	92	7	54	27	27	5.17	+1.19	1.48	0	10	15	12	4	w.	J. F. Keyser.
Averages and	extremes			70.8	− 1.8	100	7	42	26†	40	4.28	−0.09	2.01	0	10	15	8	8	w.	
State averages and	extremes			70.2	− 1.7	100	5†	40	29	40	4.54	+0.75	2.30	0	11	16	9	6	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

r Approximated by the observer.

Daily Precipitation for August, 1919.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac																																
Brandywine	do				T.	1.00								.30	.05			.52	.20			.10						T.	.15		.20	.25	2.77
Burlington	do				T.	.57	1.33							.60			.60			.25						T.					T.	3.45
Harpers Ferry ‖	do		T.			.35	.20	T.										.50		.71	.30											T.	2.06
Martinsburg	do					.23	.27								.08			2.07	.20							T.					.15	.30	3.30
Moorefield	do						.48	.14					.28	.25			*	*	*	*	*	*	*	.04					.30		.42	.02	1.93
Piedmont	do	.02			.03	.48	1.10		.01			T.	.51	.29					.26		.15	.03									.01	.07	2.96
Romney	do	*	*	*	*	.91	.92							.46	T.		.70		.60				.04			.03					.04	.03	3.73
Upper Tract	do				T.		.25							T.					.50			.10									.10		0.95
Wardensville ‖	do					1.45	.30						.50				.55		.65			.20						.43			.37	.10	4.55
Northern Division.																																	
Bens Run	Ohio				.37		1.28						.59	.27	.32		.35	.25	.30	.87		2.10	.20			.08					.67	.40	8.05
Brandonville ‖	Monongahela.		T.		.80	.40	.61	.10					.46	.05		T.	T	.20	.29	.27			.96								.90		5.04
Buckhannon	do	.12	.10			.20	.55						1.58				T.	.40	.75			.15	.45					.20			.30	.40	5.80
Central Station	Middle Is. Creek																																
Cortland ‖	Monongahela	.26	.23				.96							.70				.25		.40					.30						.50	.38		3.98
Creston ‖	Little Kanawha	1.65	.10			T.	.20						.75		.53			.10	.33	1.04		T.							T.	.26	.05	.49	4.90
Davis ‖	Monongahela																																
Elizabeth ‖	Little Kanawha	.95	.02				.41								.67		.10	.27	.23	.08	.03		.22						.38			.48	3.84
Elkins ***	Monongahela	.02			T.	.52	.26	.01					.31	.04	.06		.09	.11	.55			.36		.01		T.		.31			.31	.10	3.09
Fairmont ‖	do	.06	T.			.39	1.10	.25					.10	.69	T.	.02		.18	.09	.04			.14	.01				T.			.13	.44	3.64
Glenville ‖	Little Kanawha	1.30	.22				.82	T.						.30	.28			.40	.30	.38		T.	.52								.35	.35	5.22
Grafton	Monongahela	T.			T.	.15	1.08						2.30					.40	.22			.07	.70	.18	T.				.04		T.	.10	5.24
Lost Creek	do	T			T.	.10	.51							.65	.22		T.	.30	T.	.16		.12	.75					.05			.04	.61	3.51
Mannington	do	.16			.05	.38	.85		.06				.37	.05	.02			.39	.59	.01		.20	.56	.43				.01			.45	.25	4.82
Morgantown	do				T.			1.15	.11				.42	.20	T.		.25	.80	.96	T.		.20	1.15	T.	T.					.75	.26	6.28
Moundsville ‖	Ohio				1.10	1.40						.85	.15					.40	.10			.60			.20				1.00	1.45		7.35
New Cumberland	do	T			.04	.90	1.88	.02					.01	T.	.18		.02		.02			1.28				.32	T.				.89	.96	6.52
New Martinsville	do	.20			.10	.70	.50						2.10		.50			.50	.50	.25		.35	.25					.10			.65	.55	7.30
Parkersburg ***	Ohio	.08			T.	.22	.02						.67	.46	.21		.13	.24	.25			1.59			.03			T.			.47	.22	4.60
Parsons	Monongahela	T.					1.55						.35													1.05		.60			.20		3.55
Philippi	do																																
Pickens	do	1.65	.42			.23	.77		.15				.70		.27		.11	.21	.92			.55	1.03	.15		T.		.60			.52	.14	8.40
Rowlesburg ‖	do	.18	.10			.58	.32	.72	.08				.22	.55		.04		.14		.04			.42		.15	.14						.14	3.62
Saint Marys ‖	Ohio	.38		T.		.20	.45	.05	.04					1.70	.37	T.		.20	.14	.24		.05	1.75					T.			T.	.50	6.10
Smithfield ‖	Fishing Creek	.15				.02	.74							.41	.18	.65		.53	.10	.39	T.		1.30	.35	.03			.07			.42	.40	6.07
Terra Alta	Monongahela	.49			.03	1.25	1.10		.03				.55	.25	.01	.01		.20	.05	.09		.15	.55	.02							.18	.33	5 31
Wellsburg	Ohio	.07			.04	.90	1.74						.03		.02		.35	.16		.24		.75	*	*	*	*	*	*	*	*	1.86	6.16
Weston	Monongahela	.50					.60						.70		.10		.10		1.40	.40		.15	.60					.30			.30	.10	5.25
Wheeling ‖	Ohio	.11	T.			.75	.96	.25						.31	T.	1.		.60	.38	.04		T.	.79		.12	.55	.01	.06			.52	1.62	7.10
Southern Division.																																	
Bancroft ‖	Great Kanawha	1.08					.55		.24				.15		1.45			.23	.20	.10		.05									.20	.60	4.86
Beckley	do																.24	.24		.48											1.01	1.97
Bluefield	do	1.25	.50										.54				.37		.15			.02	.05							.10	.28	.60	3.86
Breading	do																																
Camden-on-Gauley	do	1.00			T.								.80				.24	2.00	.80			1.00						1.00			1.00	.80	8.67
Charleston ‖	do	.85	.20						T.				.20	.40	2.00				.40	.10		.25	.40							.20	.30	.96	6.26
Clay ‖	do	1.20	1.10				.30						.35			.10			.40	.45			.30							.40		.46	5.06
Cuba	Sand Creek	.05				.35	T.	T.					.40	.05	.60		.12	.07	.03			.10						.20			.15	.10	2.22
Dam 19 O. R. ‖	Ohio	.82				.01	.38						.21	.02	.50			.42	.55	.31		T.	1.90		.04						T.	.52	5.61
Dam 20 O. R. ‖	do	1.58					.19		.00						.60			.38	.40	.04			.55						.18			.45	4.28
Dam 22 O. R. ‖	do	.93						.35					.29		1.20					.24		.20							.10			.68	3.99
Dam 26 O. R. ‖	do	.65					.45						.95		.05			.18	.20			.05									T.	.35	2.88
Elkhorn	Big Sandy																																
Evans	Ohio																																
Gary ‖	Big Sandy	1.45	.80					.55	.10				.25	.10	.10	.01		.58				.07									.05		3.82
Gassaway	Great Kanawha		.02				.41						*	1.50			.60			.22		.73						.15			.24	3.87
Green Sulpr. Spgs.	do																																
Hinton ‖	do	.78	.72				T.					1.60	.18	.06	T.	.04		.24	.10	.06			.14			.08					.04	.60	4.64
Holcomb	do	1.40	.04				.40						.21		.05			.38	.35	.26			1.08							.23	1.04	.53	5.97
Huntington ‖	Ohio	.58	.04				.02						.32	T.	.18		.18	.18	T.	.06		.08	.26							.14	.10	.74	2.88
Kanawha Falls ‖	Great Kanawha	1.75	.56										.15	.90	.70				.50				.35							.40		.30	5.61
Kayford ‖	do	.61	.45						.21				.61	.54	.04			.22	.34				.09								*	2.75	5.64
Lewisburg	do	1.17				T.	.04					.06	.12	.05	.07	.14	.24	.04	.58				T.							.21	.43	.15	3.30
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do	.46					.24						.62	.04	.06		.68	.06	.08			.16				T.		.78			.68	.72	4.58
Point Pleasant ‖	Ohio	.02				.34	.10						.40	.20	.10		.48	.26				.04						.07			.48	.14	2.63
Powellton	Great Kanawha																																
Raleigh ‖	do	.65	1.36										.81	.09				.19	.17	.17												.83	4.30
Renick	do		1.10				.52						1	.25						.55										.23		1.30	3.93
Robertsburg ‖	do	.68					.60						.55		.10				.30			.06									.05	.36	2.70
Ryan	do	.11				.11	.23	.55					.20	.07	.68		.67	.41	.02			.02						.65			.45	.07	4.24
Sissonville ‖	do																																
Spencer ‖	Little Kanawha																																
Sutton	Great Kanawha																																
Union	do	.96	.15										.18					.47													.90	2.66
White Sulphur Spgs.	do																																
Williamson ‖	Big Sandy	.15	.36				T.		.60				1.08	.40	.12	.26		1.26	T.	T.		.16									T.	.78	5.17

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for August, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Panhandle Division																																	
Bayard	Maximum																																
	Minimum																																
Brandywine	Maximum	85	87	86	84	85	87	89	90	82	82	81	75	76	85	86	87	82	82	80	85	84	85	86	89	82	75	76	74	75	76	76	82.4
	Minimum	54	50	47	57	65	62	69	61	55	48	53	60	61	60	54	55	63	56	54	50	56	58	55	57	59	46	44	46	40	50	52	54.5
Burlington	Maximum	81	76	78	77	89	78	88	82	75	79	82	73	75	81	74	85	78	83	85	82	78	84	81	80	88	78	73	75	74	77	71	79.3
	Minimum	70	51	49	57	62	68	65	67	61	58	54	61	60	56	58	58	56	60	63	65	70	65	62	67	61	49	49	45	45	56	55	58.8
Martinsburg§	Maximum	80	79	82	83	85	77	91	85	80	84	86	82	78	81	85	91	85	86	86	87	84	86	91	93	79	75	79	78	81	73	80	82.9
	Minimum	68	57	53	55	66	66	66	67	55	54	55	60	65	55	55	60	61	65	61	60	61	63	63	65	71	55	57	51	51	52	58	59.7
Moorefield	Maximum	84	80	86	85	100	93	95	94	84	86	89	84	83	90	95									97	93	81	82	81	83	78	89	87.5
	Minimum	70	50	50	59	62	67	65	67	52	70	56	70	62	56	59									70	68	49	50	49	46	60	56	59.3
Piedmont	Maximum	81	81	80	78	90	82	90	80	77	89	82	80	76	80	86	86	86	81	85	83	83	88	88	81	72	75	75	74	81	75	81	81.2
	Minimum	68	51	49	57	62	67	67	66	51	51	52	61	61	56	60	59	66	61	54	59	58	59	65	67	50	48	46	47	48	57	55	57.4
Romney	Maximum					93	94	93	90	82	85	86	85	86	86	90	93	90	93	85	90	91	89	90	91	94	80	85	82	83	83	85	87.9
	Minimum					54	67	65	55	50	52	59	58	60	54	55	57	58	60	56	54	59	57	71	70	67	54	59	47	45	57	50	56.6
Upper Tract	Maximum	86	87	84	84	92	84	92	91	89	89	84	76	77	80	86	86	88	86	83	84	85	86	86	89	87	86	84	79	79	80	80	84.8
	Minimum	51	51	45	45	61	61	60	60	60	58	49	59	60	57	56	50	50	52	55	54	53	50	51	50	45	45	45	43	42	54	53	52.4
Wardensville§	Maximum	76	80	82	92	75	89	82	79	82	85	73	75	84	89	90	86	85	83	86	86	84	87	91	78	74	75	77	77	72	81		81.8
	Minimum	58	46	56	56	62	60	61	50	48	50	54	58	51	54	55	55	60	59	51	51	56	57	59	62	45	43	45	43	44	52	51	53.3
Northern Division.																																	
Bens Run	Maximum	82	80	81	84	91	86	92	81	79	81	86	79	84	82	81	85	83	76	80	86	83	85	85	86	84	70	71	72	80	75	73	81.5
	Minimum	70	56	55	60	68	68	67	66	53	52	55	61	61	65	64	65	65	62	61	60	65	66	67	66	64	54	52	50	53	65	52	60.9
Buckhannon	Maximum	78	74	79	83	86	81	87	81	75	78	83	74	80	81	85	87	82	79	78	83	82	80	84	82	75	71	74	74	77	70	71	79.2
	Minimum	69	53	49	53	67	67	63	64	57	50	53	63	57	66	60	60	65	58	57	56	60	65	62	66	66	52	51	52	45	60	54	58.7
Creston	Maximum	80	81	89	90	94	88	96	86	82	84	87	85	88	87	92	91	86	81	85	88	85	89	91	90	85	79	79	78	82	77	76	85.5
	Minimum	58	54	52	56	61	68	65	60	52	49	49	62	58	61	61	64	63	59	57	57	62	65	63	63	64	49	52	48	51	62	55	58.1
Elkins	Maximum	74	70	78	82	87	73	86	75	75	77	82	70	78	79	82	88	80	75	75	80	79	78	82	82	71	67	70	68	75	69	74	76.8
	Minimum	63	49	46	53	61	66	62	58	55	49	51	60	59	61	59	58	63	56	57	54	57	61	62	61	50	50	48	47	45	57	54	56.0
Fairmont§	Maximum	89	82	86	88	94	85	93	81	80	85	91	71	83	81	92	93	87	80	82	88	87	89	94	90	77	75	79	79	83	72	79	84.2
	Minimum	66	54	52	56	60	68	67	68	53	51	52	54	61	62	63	61	62	62	60	55	57	59	64	64	66	50	51	53	49	51	54	58.2
Glenville	Maximum	83	83	86	90	95	95	96	93	85	86	91	90	90	88	93	93	89	89	85	89	89	88	92	92	92	79	80	79	84	83	81	88.0
	Minimum	69	53	54	57	64	68	65	66	52	52	53	60	58	65	63	64	62	59	58	57	60	65	68	64	63	47	50	53	50	61	53	59.1
Grafton	Maximum	79	86	83	83	94	90	95	90	83	81	89	85	83	82	90	91	75	81	82	87	84	85	89	88	83	74	77	77	83	75	74	83.9
	Minimum	70	49	54	53	66	67	66	67	51	48	49	61	60	62	61	60	64	60	57	55	60	60	61	61	64	51	48	53	48	59	53	58.0
Lost Creek	Maximum	78	77	79	84	88	82	89	85	80	80	88	73	80	81	89	88	89	81	82	86	78	85	87	83	80	75	72	71	74	70	76	81.0
	Minimum	69	52	49	60	66	62	63	60	52	47	50	58	60	56	60	58	59	58	56	55	59	61	64	65	58	49	52	50	46	61	58	57.2
Mannington	Maximum	77	76	78	77	88	86	88	86	75	77	81	76	80	78	85	86	80	76	77	82	81	81	85	83	82	71	72	72	78	76	73	79.5
	Minimum	69	51	50	54	65	67	64	65	50	48	48	56	59	61	59	58	63	59	58	54	60	60	62	61	63	49	48	46	48	59	53	57.0
Morgantown	Maximum	80	78	82	82	90	90	89	90	76	79	88	87	81	81	87	91	84	74	79	81	83	82	84	86	83	72	74	75	81	82	81	82.3
	Minimum	68	53	50	58	56	65	64	67	49	51	50	65	64	63	65	62	62	59	61	56	65	59	67	68	60	50	55	49	53	63	53	59.5
New Cumberland	Maximum	80			79	88	85	90	85	75	76	81	75	80	81	89	89		78	81	85	77	85			82	75	74	77	79	74	71	80.4
	Minimum	65			51	66	67	62	62	46	47	49	54	60	62	66	60		62	61	54	61	59			59	50	50	46	52	60	51	57.1
New Martinsville	Maximum	82	81	84	85	92	90	93	88	80	80	89	88	82	78	89	88	81	74	82	88	88	87	89	88	84	77	77	84	83	77	75	83.9
	Minimum	70	54	54	58	68	69	66	69	54	52	54	59	60	61	63	62	65	60	60	58	64	63	66	65	63	57	53	49	51	63	57	60.3
Parkersburg	Maximum	78	77	83	88	92	86	91	78	78	79	88	79	85	84	90	88	85	78	81	88	85	86	90	89	74	75	75	77	81	76	72	82.5
	Minimum	67	58	55	62	70	70	68	62	57	56	55	64	65	67	68	68	64	64	64	63	67	68	70	70	63	57	56	56	53	59	56	62.4
Parsons	Maximum	76	76	79	78	86	79	87	79	80	81	84	71	83	79	85	90	81	76	76	82	81	79	82	85	72	71	73	70	76	70	75	78.8
	Minimum	65	49	49	55	63	65	61	63	50	50	49	58	51	59	61	55	64	56	56	55	56	60	59	58	57	48	43	51	48	56	57	55.7
Philippi	Maximum																																
	Minimum																																
Pickens	Maximum	73	73	75	85	87	73	89	79	77	79	85	73	80	81	83	85	81	71	80	73	77	79	83	84	74	67	74	70	76	65	74	77.6
	Minimum	60	45	55	53	62	61	58	59	55	47	50	59	55	60	55	55	59	55	55	53	57	60	58	58	55	46	45	45	42	51	50	54.1
Terra Alta	Maximum	73	68	76	74	84	76	84	76	74	78	82	71	74	73	80	85	78	73	73	77	76	74	77	79	75	65	68	67	75	67	70	74.8
	Minimum	65	48	44	50	63	63	64	59	45	46	48	60	58	54	60	59	59	57	56	53	58	56	63	61	59	48	50	48	50	58	49	55.2
Wellsburg	Maximum	80	82	80	78	92	86	92	84	80	79	86	74	84	85	88	89	81	79	80	80	81	85										83.0
	Minimum	66	49	56	67	65	68	65	62	49	46	49	54	56	62	58	57	62	60	58	52	59	57										58.0
Weston	Maximum	80	77	82	85	90	90	90	84	79	81	86	85	83	82	88	89	84	81	80	85	83	83	86	87	83	73	75	74	79	76	84	82.7
	Minimum	69	54	51	55	68	68	64	69	54	50	52	62	59	66	62	61	65	61	61	58	62	64	66	65	66	52	54	53	49	64	56	60.0
Wheeling§	Maximum	84	85	87	75	97	92	95	79	86	85	88	75	87	87	95	92	84	82	86	91	84	92	92	92	82	80	82	84	86	78	80	85.9
	Minimum	67	54	54	55	60	67	67	66	51	50	50	55	58	61	63	63	64	62	62	57	58	60	67	65	62	53	54	47	47	47	54	58.1
Southern Division.																																	
Beckley	Maximum	80	86	84	87	82	84	86	84	87	82	82	72	79	82	82	85	80	81	80	83	82	80	81	82	75	80	78	75	86	81	75	81.4
	Minimum	61	60	48	70	70	60	55	60	60	61	57	57	56	68	61	58	71	58	62	62	63	63	57	60	60	40	48	46	50	58	58	58.9
Bluefield	Maximum	87	75	76	84	87	82	87	84	80	82	81	76	78	84	85	86	84	81	78	82	79	78	84	81	75	75	76	74	73	75	70	80.0
	Minimum	65	58	60	51	53	58	59	59	57	56	55	56	46	51	55	48	61	56	56	53	61	63	58	56	56	49	50	50	55	62	51	55.5
Charleston	Maximum	89	81	89	93	94	91	100	90	84	86	90	88	90	89	94	93	90	84	87	90	89	90	87	90	92	90	89	84	83	74	78	88.3
	Minimum	65	59	56	61	64	70	68	70	56	55	56	56	67	65	66	65	61	62	61	60	62	66	65	62	66	53	53	54	59	52	59	61.1
Elkhorn	Maximum																																
	Minimum																																
Green Sulphur Spgs.	Maximum																																
	Minimum																																
Hinton§	Maximum	82	76	83	86	91	86	91	84	81	82	84	74	80	85	86	85	83	82	81	85	83	83	87	88	78	75	77	72	70	71	74	81.5
	Minimum	60	60	56	56	62	65	67	66	62	62	60	62	59	60	65	63	62	60	60	59	60	63	62	62	63	52	51	51	54	56	60	60.0
Holcomb§	Maximum	77	73	81	85	88	77	89	81	87	79	85	72	80	84	83	86	82	78	79	83	83	80	83	84	74	72	73	69	75	76	75	79.8
	Minimum																																
Huntington§	Maximum	84	84	86	95	94	93	97	88	86	86	90	85	87	90	96	87	88	83	88	90	85	90	92	91	81	83	80	80	84	72	68	85.5
	Minimum	70	61	57	62	66	71	69	70	57	56	54	60	64	64	63	65	66	65	63	61	65	67	66	67	66	55	55	56	52	55	58	62.1
Lewisburg	Maximum	79	74	80	82	88	80	88	81	77	80	82	70	78	81	82	85	81	79	78	80	80	78	82	83	75	76	74	69	73	69	76	78.7
	Minimum	66	56	49	56	60	67	63	68	55	54	58	64	59	61	59	61	56	52	53	57	63	57	55	59	47	43	48	46	57	55	55	56.8
Marlinton	Maximum	76	70	74	80	88	78	84	78	76	78	74	68	72	76	78	78	76	74	76	74	74	72	82	80	72	64	68	64	68	68	66	74.4
	Minimum	66	50	44	52	60	62	58	54	54	56	52	52	54	54	54	56	54	50	52	50	54	52	54	52	56	42	48	46	42	52	52	52.7
Point Pleasant	Maximum	83	81	86	91	93	91	96	90	83	84	90	84	88	88	94	90	88	86	87	91	87	91	95	90	85	80	81	79	85	79	76	86.8
	Minimum	71	56	54	59	70	69	66	65	52	49	50	64	63	68	61	65	64	63	62	61	66	65	70	70	60	60	53	51	49	66	55	61.2
Powellton	Maximum																																
	Minimum																																
Robertsburg§	Maximum	81	80	88	90	92	88	97	83	82	82	90	83	88	86	95	92	87	82	85	89	86	88	89	89	79	79	80	79	87	76	73	85.3
	Minimum	67	59	52	54	63	69	67	67	53	52	51	52	58	65	63	67	66	60	60	59	60	66	63	64	65	49	50	54	49	52	56	59.1
Ryan	Maximum	85	79	84	86	94	86	93	85	85	82	87	80	85	84	90	90	83	82	81	85	83	86	87	86	84	78	80	79	80	71	76	83.7
	Minimum	70	54	50	54	65	67	63	66	53	49	49	63	55	59	60	60	65	57	57	55	57	65	65	65	60	60	50	55	47	61	55	58.4
Spencer§	Maximum																																
	Minimum																																
Sutton	Maximum																																
	Minimum																																
Union§	Maximum	89	80	84	87	89	88	88	89	82	85	86	82	78	86	87	88	87	89	83	85	83	88	89	88	86	80	78	75	71	85	80	84.4
	Minimum	54	58	59	60	60	68	61	66	55	56	54	63	59	60	60	60	58	55	52	52	57	57	56	54	56	44	42	45	48	50	48	55.7
White Sulphur Spgs.	Maximum																																
	Minimum																																
Williamson§	Maximum	82	78	83	89	90	88	92	84	79	82	82	78	81	84	86	86	84	81	80	85	82	82	85	85	78	76	80	71	78	75	74	81.9
	Minimum	65	64	59	63	63	72	70	70	61	60	60	62	64	64	68	66	66	63	63	64	65	64	65	66	67	56	54	56	55	60	60	63.1

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.
Based on 850 records.
NO RAIN

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

SEPTEMBER, 1919

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
OCTOBER 28, 1919

Departure of the Mean Temperature from the Normal, September, 1919.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXVII. PARKERSBURG, W. VA., SEPTEMBER, 1919. No. 9

GENERAL SUMMARY.

September was dry, slightly cooler than usual, free from marked extremes in temperature, and exceptionally pleasant. While scattered light frosts occurred in the more elevated localities near the close of the last decade, no damage resulted and late growth was unimpeded. Corn ripened and winter grains were thrashed under exceptionally favorable conditions. The ground, however, was generally too dry for plowing and seeding. At the close of the month corn cutting was nearly completed and the crop was generally excellent. The seeding of winter grains was also well advanced and silos were being filled.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.08 and 30.10 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.36 inches on the 28th, and 29.75 inches on the 19th. Elkins, 30.41 inches on the 28th, and 29.67 inches on the 11th.

TEMPERATURE.

The monthly mean for the State, determined from 45 stations, was 66.0°. The departure from the normal for 40 stations having ten or more years of record was —0.2°. Abnormally cool weather prevailed from the 1st to the 4th and the 12th to the 14th. The temperatures were considerably above the normal from the 6th to the 10th and the 19th to the 22d, with the maximum readings for the month occurring generally from the 7th to the 10th. While the temperatures were near the normal from the 26th to the 29th, light frosts occurred in scattered localities during that period. A temperature of 31° was recorded at Brandywine, Pendleton County, on the 29th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 79 per cent; 8 p. m., 65 per cent. The September averages for the same hours for the past 31 years are 84 and 71 per cent, respectively. Elkins, 8 a. m., 93 per cent; 8 p. m., 80 per cent. The September averages for Elkins for the same hours for the past 18 years are 92 and 83 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, determined from 61 stations was 2.11 inches. The departure from the normal for 44 stations having ten or more years of record was —0.81 inch. While the rainfall was quite favorably distributed over the State, the amounts were generally greatest over the northern counties and least over the central and west-central counties. Light to moderate rains occurred on the 11-12th, 20th, 21st, 22d, and 23d, and the greatest amounts were recorded on the 11th, 22d, and 23d.

WIND.

The average wind velocity at Parkersburg was 4.2 miles per hour, or 0.1 mile below the September average for 29 years. The average at Elkins was 3.5 miles per hour, or 0.7 mile above the September average for 20 years. The highest velocity at Parkersburg was 31 miles per hour from the south on the 19th, and at Elkins 20 miles per hour from the west on the 16th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 56 per cent of the possible amount, or 2 per cent below the September average for 22 years. The average at Elkins was 56 per cent, or 3 per cent above the September average for 20 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 13th, 14th, 15th, 16th, 17th, 24th, 25th, 26th, 27th, 28th, 29th, and 30th; Charleston, 2d, 5th, 6th, 8th, 25th, 26th, 27th, 28th, 29th, and 30th; Creston, 2d, 3d, 5th, 6th, 8th, 10th, 13th, 14th, 16th, 17th, 24th, 27th, 28th, and 29th; Elkins, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 13th, 14th, 15th, 16th, 17th, 18th, 24th, 27th, 28th, 29th, and 30th; Fairmont, 2d, 3d, 5th, 13th, 14th, 27th, and 29th; Glenville, 2d, 3d, 15th, 16th, and 17th; Hinton, 6th, 21st, 25th, and 29th; Huntington, 2d and 3d; Mannington, 1st, 3d, 5th, 6th, 7th, 8th, 13th, 14th, 16th, 17th, 24th, 26th, 28th, and 29th; Marlinton, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 24th, 25th, 26th, 27th, 28th, 29th, and 30th; New Cumberland, 1st, 3d, 4th, 5th, 6th, 7th, 8th, 13th, 14th, 16th, 17th, 18th, 26th, 27th, 28th, and 29th; Parkersburg, 2d, 3d, 5th, 13th, and 17th; Point Pleasant, 2d, 5th, 6th, 10th, 13th, 14th, 17th, 27th, and 28th; Smithfield, 1st, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 9th, 10th, and 24th; Terra Alta, 2d, 8th, 10th, 13th, and 24th; Wheeling, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 13th, 14th, 16th, 17th, 18th, 24th, 26th, 27th, 28th, 29th, and 30th; Williamson, 1st, 2d, 5th, 6th, 7th, 8th, 10th, 15th, 16th, 17th, 18th, 25th, 26th, and 27th.

Frost, light: Burlington, 27th, 28th, and 29th; Creston, Evans, Ryan, Terra Alta, and Wardensville, 27th; Elkins and Holcomb, 29th; Powellton, 25th; Romney, 27th and 28th.

Halo, lunar: Elkins, 7th.

Thunderstorms (dates and number of stations reporting): 1st, 1; 2d, 2; 9th, 7; 10th, 9; 11th, 6; 12th, 1; 19th, 1; 20th, 1; 21st, 3; 22d, 1.

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	66.8	.....	.....	1.66	....	....	....	..	..	..
1892	64.4	92	32	2.57	....	....	....	..	..	..
1893	65.0	91	29	2.28	4.50	1.05	....	..	..	..
1894	67.8	98	31	2.50	4.75	1.25	....	12	11	7
1895	70.3	107	29	1.70	4.25	0.42	....	17	8	5
1896	65.2	95	22	4.59	9.01	1.58	....	14	9	7
1897	66.4	103	27	1.14	4.00	0.02	....	22	6	2
1898	67.6	97	33	2.42	4.75	0.80	....	16	10	4
1899	64.0	100	26	3.65	6.35	1.65	....	14	9	7
1900	71.1	100	35	1.92	5.50	0.34	....	14	10	6
1901	64.8	95	27	3.35	7.64	1.46	....	13	8	9
1902	64.8	98	25	2.98	4.81	1.23	....	12	9	9
1903	64.7	97	25	1.30	2.78	0.10	....	21	6	3
1904	67.0	95	25	1.76	4.55	0.53	....	16	10	4
1905	65.6	97	29	2.21	4.21	0.54	....	18	8	4
1906	69.9	97	38	3.25	5.44	0.57	....	12	10	8
1907	66.3	93	30	4.41	7.10	2.00	....	12	10	8
1908	65.9	99	24	0.95	2.54	0.26	....	21	6	3
1909	65.7	95	28	2.74	8.75	0.65	....	15	9	6
1910	68.4	97	32	3.50	6.04	0.50	....	12	11	7
1911	68.8	100	32	4.67	8.30	1.80	....	12	11	7
1912	68.6	98	30	3.85	9.18	1.13	....	17	7	6
1913	64.2	100	25	2.88	6.38	0.86	....	14	7	9
1914	65.2	97	24	1.58	5.65	0.17	....	18	6	6
1915	67.6	100	31	3.84	7.18	2.00	....	16	8	6
1916	65.0	99	27	3.71	7.88	1.01	....	18	6	6
1917	62.4	98	23	2.79	6.62	1.16	T.	17	7	6
1918	60.5	93	24	2.92	4.73	1.37	T.	15	7	8
1919	66.0	98	31	2.11	4.37	0.12	....	18	7	5
Means and extremes ..	66.0	107	22	2.73	9.18	0.02	T.	16	8	6

Climatological Data for September, 1919.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	18																	G. C. Dixon.
Brandywine ††	Pendleton		3	64.0		90	7†	31	29	54	0.75		0.55	0	4	25	3	2	sw.	Elmer Keister.
Burlington	Mineral	875	25	64.3	− 0.4	92	10	35	28†	43	1.42	−1.43	0.65	0	3	15[a]	12[a]	2[a]		J. W. Vandiver.
Harpers Ferry	Jefferson	244	30								2.30	−0.54	0.90	0	4				e.	S. W. Lightner.
Martinsburg	Berkeley	435	27	67.3	+ 0.8	93	8	42	27†	37	2.27	−0.54		0	4	23	3	4	nw.	G. W. Van Metre, C. E.
Moorefield [b]	Hardy	900	23	66.8	0	98	6†	37	27†	47	1.41	−1.23	0.75	0	5	27	0	1		M. S. Henkel.
Piedmont	Mineral	919	6	66.0		92	9	38	28	41	1.33		0.75	0	5	17	6	7	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	21	67.3	+ 0.8	97	9	36	27†	47	1.91	−0.58		0	5	12	15	3		Geo. E. Arnold.
Upper Tract [b]	Pendleton	1,230	20	64.7	− 1.4	92	6†	34	13	50	1.20	−1.18	1.00	0	2	25	1	2	w.	J. M. Mallow.
Wardensville	Hardy	1,200	1	63.0[b]		91[b]	6	34[a]	27	48[c]	3.08		1.00	0	7	20	3	7	w.	Luther F. Sutton.
Averages and	extremes			65.6	0	98	6†	31	29	50	1.86	−0.92	1.00	0	4	20	6	4	w-nw	
Northern Division.																				
Bens Run	Pleasants	622	17	68.1	0	91	6†	46	27	36	1.52	−0.87	1.05	0	5	22	4	4		J. D. Riggs.
Brandonville ††	Preston	1,809	8											0						W. H. Miller.
Buckhannon	Upshur	1,411	22	63.6	− 0.8	86	9†	39	27†	38	2.51	−0.63	0.74	0	5	18	10	2		H. A. Darnall.
Cortland	Tucker	3,300	3								0.96		0.50	0	2					Samuel Harmon.
Creston	Wirt	701	17	68.7	+ 1.2	94	9†	40	27	46	1.24	−1.46	0.65	0	6	22	2	6	sw.	J. M. Reed.
Davis	Tucker	3,093	10																	Branson Harper.
Elizabeth	Wirt	646	7								1.33		0.49	0	3					E. D. Ball.
Elkins	Randolph	1,947	18	62.0	+ 0.1	86	9	35	29	45	2.28	−0.59	1.57	0	6	7	13	10	w.	U. S. Weather Bureau.
Fairmont	Marion	883	13	67.1	− 0.2	93	7	41	27	45	2.75	+0.15	1.29	0	5	23	4	3	w.	F. P. Hall.
Glenville	Gilmer	738	25	69.2	+ 1.5	95	7†	38	26	49	2.81	−0.54	1.76	0	5	25	3	2	w.	Howard R. Brannon.
Grafton [c]	Taylor	1,000	26	67.3	+ 0.5	93	9†	36	29	52	1.58	−1.38		0	4	16	8	3	e.	W. C. Byers.
Lost Creek	Harrison	1,026	21	65.0	− 0.2	93	7†	36	27†	49	0.99	−1.84	0.58	0	5	20	8	2	w.	Allen Smith.
Mannington	Marion	971	16	64.3	− 1.1	88	9	38	27†	42	3.24	−0.11	1.70	0	8	16	8	6	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	26	68.3[g]	+ 0.8	90[f]	8	42[g]	13	33[g]	3.38	+0.27		0	10	4[e]	10[e]	11[e]		Prof. E. L. Andrews.
Moundsville	Marshall	642	16	67.0[a]	− 0.8	93[a]	8	41	26	42[a]	2.30	−0.25	1.03	0	4	10	12	8	sw.	M. Z. White.
New Cumberland	Hancock	987	21	64.6	− 0.9	89	7†	37	26†	40	2.22	−0.24	0.72	0	7	15	12	3	sw.	M. F. Smith.
New Martinsville	Wetzel	634	25	68.6	− 0.1	94	9	44	27	42	2.00	−0.71	1.25	0	4	22	6	2	s.	Wm. Ankrom.
Parkersburg	Wood	638	32	68.6	+ 2.4	94	9	45	14	34	0.98	−1.74	0.65	0	5	11	10	9	nw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	19	63.2	− 0.1	87	7†	32	29	51	2.47	−0.85	2.00	0	3	18	8	4		J. W. Swisher.
Philippi	Barbour	1,149	22																	Attie G. Robinson.
Pickens	Randolph	2,697	16																	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	32								4.37	+1.42	1.19	0	8				e.	J. F. Pierce.
Saint Marys	Pleasants	577	10								2.24	−1.22	0.75	0	6				sw.	Wm. Hughes.
Smithfield	Wetzel	835	13	63.4	− 1.2	90	9	37	27	41	2.14	−1.35	1.13	0	7	25	4	1	sw.	G. M. Whisler.
Terra Alta	Preston	2,612	18	61.6	− 1.5	84	7†	38	13†	38	2.73	−1.00	1.07	0	9	17	5	8	w.	W. J. Grimm.
Wellsburg	Brooke	1,225	18	64.4	− 0.3	89	7†	37	27	40	2.06	−0.79	1.02	0	9	19	6	5	w.	George P. Phister.
Weston	Lewis	1,026	23	67.1	− 0.3	91	10	41	15†	43	1.15	−1.86	0.50	0	4	20	8	2		Weston State Hospital
Wheeling	Ohio	645	32	68.0	+ 1.3	97	9	43	26†	44	1.65	−0.94	0.52	0	7	19	5	6	w.	Miss M. B. Forsyth.
Averages and	extremes			66.0	0	97	9	32	29	52	2.12	−0.75	2.09	0	6	18	7	5	w.	
Southern Division.																				
Bancroft	Putnam	574	15	67.4[b]	− 1.9	92[b]	10	42	27	38[b]	3.03	+0.17	1.43	0	4	27	0	3	nw	R. E. Dent.
Beckley	Raleigh	2,440	19	62.1	− 1.5	89	6	37	29	39	1.00	−1.69	0.75	0	2	16	12	2	w.	John A. Ewart.
Bluefield	Mercer	2,558	24	65.2	− 1.0	87	10	42	13†	40	1.06	−1.66	0.70	0	4	18	7	5		Norfolk & Western Ry.
Breading	Mingo	507	2																	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	4								4.00			0	5	9	4	17	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	16	72.0	+ 1.8	96	10†	45	29	44	2.62	−0.33	0.75	0	7	4	3	23	w.	C. V. Lewis.
Clay	Clay	706	3								3.45		1.37	0	6					Prof. E. H. Knabenshue.
Cuba	Jackson	650	17	67.4	+ 0.6	89	4	40	27	45	1.49	−0.91	0.41	0	8	15	11	4	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	3								1.92		0.84	0	5					Lockmaster.
Dam 20 O. R.	Wood	551	3								1.44		0.95	0	3					Lockmaster.
Dam 22 O. R.	Jackson	538	4								1.64		1.34	0	3					Lockmaster.
Dam 26 O. R.	Mason	505	3								1.66		0.82	0	6					U. S. Engineer Office.
Elkhorn	McDowell	1,933	26																	J. J. Lincoln.
Evans	Jackson	606	7	67.6		90	10	42	27	34	2.14		1.34	0	6	20	0	10		B. F. Sayre.
Gary	McDowell	1,426	3								3.13		1.32	0	6					U. S. Coal & Coke Co.
Gassaway ††	Braxton										1.01		0.64	0	4					W. H. Gunn.
Green Sulphur Spgs.	Summers	1,600	23																	H. A. Hays.
Hinton	..do	1,450	22	67.2	− 0.9	93	10	43	29†	45	1.26	−1.46	0.44	0	8	20	3	7	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	7	62.0		89	10	36	29	45	3.80		1.30	0	6	20	2	8		W. C. Williams.
Huntington	Cabell	538	25	70.1	+ 1.6	96	10	45	27†	41	3.24	+0.89	1.24	0	6	23	3	4		L. H. Hutchinson.
Kanawha Falls	Fayette	618	0								1.90		1.00	0	2					J. O. Brown
Kayford	Kanawha	1,335	3								1.81		0.74	0	4					Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	19	63.2	− 1.3	88	10	34	29	43	2.17	−0.58	0.86	0	6	24	4	2	s.	Geo. T. Argabate.
Logan	Logan	687	16																	Agent C. & O. Ry.
Madison	Boone	704	13																	S. E. Bradley.
Marlinton	Pocahontas	2,131	20	59.0	− 3.2	82	8	33	29	38	1.36	−1.84	0.60	0	6	5	23	2	sw.	S. L. Brown.
Point Pleasant	Mason	553	26	69.8	+ 0.1	96	8	40	27	44	2.10	−0.18	1.11	0	7	13	8	9		W. D. Holmes.
Powellton [a]	Fayette	933	23	64.6	− 2.6	87	10	43	27	30	1.33	−1.54	0.50	0	5	24	4	1		Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	3								3.80		1.30	0	7					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	3								1.58		0.78	0	3				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	19	68.8	+ 0.3	93	6†	41	27	44	2.32	−0.08	0.60	0	5	19	1	10	s.	E. C. Brace, Jr.
Ryan	Roane	700	16	67.1	+ 0.9	92	9†	33	27	47	3.00	+0.12	1.26	0	7	23	3	4		Wm. E. Ryan.
Sissonville	Kanawha	625	3																	J. N. Johnson.
Spencer	Roane	784	15																	A. M. McKown.
Sutton [d]	Braxton	839	13	64.6		91	21	41	27†	37	0.12	−3.21	0.12	0	1	11	10	5		Lawrence Freeman.
Union	Monroe	2,250	15	65.6	+ 0.5	90	8†	36	29	47	1.70	−1.11	0.61	0	4					Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	9																	J. M. Ayres.
Williamson	Mingo	660	19	68.6	− 1.2	90	10	51	27†	29	2.81	−0.14	1.42	0	8	21	6	3	w.	J. F. Keyser.
Averages and	extremes			66.2	− 0.5	96	8†	33	27†	47	2.17	−0.85	1.43	0	5	17	6	7	w.	
State averages and	extremes			66.0	− 0.2	98	6†	31	29	52	2.11	−0.81	2.00	0	5	18	7	5	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[c] Approximated by the observer.

Daily Precipitation for September, 1919.

Stations.	Watersheds.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Wyard	Potomac									T.	.15	.05											.20	.35									0.75
Andywine	do											.65	T.									T.	.65	.12									1.42
Arlington	do											.90	.20											.50	.70								2.30
Artinsburg	do	T.									.32					.23					T.		*	1.72								2.27
Bakerfield	do									.14	.24										.20		.08	.75									1.41
Edmont	do										.75	.01	.06					T.				T.	.35	.16									1.33
Finney	do									T.	.88	.03										.07	*	.93									1.91
Piper Tract	do												T.										.20	1.00									1.20
Wardensville	do									.75	.63	.18				.02					.10		1.00	.40									3.08
Northern Division.																																	
Bens Run	Ohio										.13										.05	.20	1.05	.09									1.52
Brandonville	Monongahela																																
Buckhannon	do										.40	.07									T	.60	.74	.70									2.51
Central Station	Middle Is. Creek																																
Cortland	Monongahela																						.46	.50									0.96
Weston	Little Kanawha										.03	.42									.04		.10	.50	.15								1.24
Davis	Monongahela																																
Elizabeth	Little Kanawha											.46											.38	.49									1.33
Elkins***	Monongahela		T.							.42	.02	.04								T.		.18	1.32	.30									2.28
Fairmont	do	T.		T.							.03	.95	T.								T.		.48	1.20	.09								2.75
Glenville	Little Kanawha										1.25	.51											.45	.42	.18								2.81
Grafton	Monongahela	T.								.06	.06	T										T.	*	1.46									1.58
Hust Creek	do			T.							.07	.04											.20	.10	.58								0.99
Huntington	do	.06				.01					.12		.04								.11	.54	1.70	.66									3.24
Morgantown	do		.05	.06						.04	.06	.15	.04	.03								.05	*	2.90									3.38
Moundsville	Ohio									1.03	.57											.25	.45										2.30
New Cumberland	do	.01	.33		T.						.41	.04	T.								.64	T.	.72	.04									2.22
New Martinsville	do	.10									.35											.30	1.25										2.00
Parkersburg ***	Ohio				T.					T.	.18									T.	.01	T.	.58	.16	.05								0.98
Parsons	Monongahela		.02							T.	T.	T.				.45						T.	T.	T.	2.00								2.47
Philippi	do																																
Pickens	do																																
Powiesburg	do	1.19		.18							.35	.81	.15										.76	.83	.10								4.37
Saint Marys	Ohio	.53				T.					.75	.05											.56	.30	.05								2.24
Smithfield	Fishing Creek	.04									.17										.05	.01	.70	1.13	.04								2.14
Sterra Alta	Monongahela		.01		.03					.06	1.07	.16	.01									.42	.45	.54									2.73
Wellsburg	Ohio	T.	.04							.18	.18	.03									.15	.25	.17	1.02	.04								2.06
Weston	Monongahela										.10	.05											.50	.50									1.15
Wheeling	Ohio	.10			T.						.10	.05	.02								.36	T.	.52	.50	T.								1.65
Southern Division.																																	
Alucroft	Great Kanawha											1.43									.10		.45	1.05									3.03
Beckley	do									.25														.75									1.00
Bluefield	do											.13	.20										.70	.03									1.06
Reading	do																																
Camden-on-Gauley	do											1.00									.80	.20	*	2.00									4.00
Charleston	do	.10									.45	.52									.20		.50	.75	.10								2.62
Clay	do											1.20	.35								.05		.38	1.37	.10								3.45
Cuba	Sand Creek			.27		.13						T.	.18			T.	.14	.41				.05	.20	.11									1.49
Dam 19 O. R.	Ohio	.11									.84	.16									T.		.66	.15	T.								1.92
Dam 20 O. R.	do																				.04		.45	.95									1.44
Dam 22 O. R.	do											1.34											.28		.02								1.64
Dam 26 O. R.	do	.05										.82									.22		.32	.22	.03								1.66
Elkhorn	Big Sandy																																
Evans	Ohio										.21	1.34								.10		.16	.05	.28									2.14
Gary	Big Sandy	.77										.82									.05		.14	1.32	.03								3.13
Gassaway	Great Kanawha										.02	.03											.64	.32									1.01
Green Sulpr. Spgs.	do																																
Hinton	do	.04										.24	.14								.40	.04	.10	.24	.06								1.26
Holcomb	do										.24	1.06									.51	.59	.97	.63									3.80
Huntington	Ohio										.16	1.24									.78		.62	.42	.02								3.24
Kanawha Falls	Great Kanawha											.90									T.		T.	1.00									1.90
Mayford	do											.70								.35			.02	.74	T.								1.81
Newisburg	do									.07		.67									.32	.12	.86	.13									2.17
Pogan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do									.06		.26									.60	.04	.32	.08									1.36
Point Pleasant	Ohio									.54	.06	1.05									.04	.13	.13	.15									2.10
Powellton	Great Kanawha											.50	.01								.09		.34	.39									1.33
Raleigh	do	.08									.49	.42									1.30		.23	1.20	.08								3.80
Renick	do																				T.	.78	.20	.60	T.								1.58
Robertsburg	do										.58	.60								.37			.42	.35									2.32
Ryan	do										.02	.60								.06	.59	.18	1.26	.29									3.00
Sissonville	do																																
Spencer	Little Kanawha																																
Sutton	Great Kanawha																				.12												0.12
Union	do											.61									.40		.61	.08									1.70
White Sulphur Spgs.	do																																
Williamson	Big Sandy	.05									T.	1.22	.22								.60	.30	.12	.30	.02								2.81

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for September, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Brandywine	Maximum	75	75	74	77	80	88	90	89	90	89	87	80	75	81	82	80	76	78	85	89	88	88	73	74	75	73	72	75	85	86	..	80.9
	Minimum	51	42	42	43	55	54	52	54	55	61	62	54	34	36	39	48	42	44	52	54	57	67	58	42	40	36	33	32	31	40	..	47.0
Burlington	Maximum	74	76	75	72	78	82	87	88	88	92	85	86	73	74	77	80	75	73	85	88	86	77	70	72	77	67	69	74	78	83	..	78.7
	Minimum	48	46	44	43	42	56	57	54	58	63	66	63	54	42	42	50	47	44	48	62	59	67	56	43	46	45	39	35	35	44	..	49.9
Martinsburg§	Maximum	74	76	80	77	83	89	92	93	92	87	87	72	75	78	81	82	77	75	79	90	90	80	62	75	75	80	70	73	74	81	..	80.0
	Minimum	58	49	50	58	53	58	62	62	65	68	68	59	51	47	50	55	53	49	50	60	64	70	61	49	50	48	42	42	44	44	..	54.6
Moorfield	Maximum	78	82	82	84	87	98	97	98	96	91	90	86	79	87	.	88	85	78	..	82	78	75	71	67	72	64	61	66	75	75	..	81.1
	Minimum	54	44	45	47	59	55	54	58	60	67	66	56	39	40	..	75	48	47	..	64	60	61	60	49	46	53	37	42	37	45	..	52.4
Piedmont	Maximum	73	74	76	78	84	89	91	90	92	87	85	77	77	81	84	80	76	75	84	90	89	81	69	74	78	75	72	76	81	84	..	80.7
	Minimum	51	44	46	48	51	54	56	59	68	66	64	55	43	44	49	53	47	45	51	60	58	67	64	46	45	44	39	38	40	48	..	51.4
Romney	Maximum	80	78	79	82	86	93	95	93	97	91	90	77	79	81	86	81	79	80	87	95	92	84	73	77	84	77	76	79	83	86	..	84.0
	Minimum	45	43	45	55	54	53	55	58	64	65	63	56	46	41	46	52	49	40	54	64	60	59	58	48	50	48	36	36	36	45	..	50.6
Upper Tract	Maximum	72	74	78	78	84	92	92	91	91	90	89	86	84	84	84	84	84	86	91	91	88	87	87	80	80	79	73	79	..	..	..	84.2
	Minimum	49	43	40	40	44	50	51	56	55	56	55	55	34	35	35	43	42	42	46	45	50	56	55	42	42	36	35	35	..	..	..	45.2
Wardensville§	Maximum	74	75	79	80	88	91	90	89	88	87	73	..	78	75	76	76	72	82	88	87	81	62	65	80	68	69	72	79	83	..	..	78.8
	Minimum	48	47	44	45	46	52	55	55	58	61	55	39	..	39	45	48	47	46	54	60	58	59	43	42	43	36	34	35	35	44	..	47.3
Northern Division.																																	
Bens Run	Maximum	72	76	81	69	83	91	87	91	91	87	82	72	78	78	77	79	78	81	86	89	85	70	69	75	79	70	82	84	85	81	..	80.3
	Minimum	52	51	51	52	57	59	62	64	66	68	68	55	48	49	53	58	52	54	57	63	64	61	57	50	51	47	46	54	50	59	..	55.9
Buckhannon	Maximum	68	71	71	74	77	83	84	82	86	86	80	73	69	74	77	76	74	72	76	83	83	74	71	68	71	66	74	75	77	80	..	75.8
	Minimum	52	43	45	48	52	54	66	59	63	66	67	53	40	41	47	55	45	49	48	56	62	67	56	46	46	47	39	41	39	50	..	51.4
Creston	Maximum	78	78	82	80	85	91	91	92	94	94	84	73	80	81	86	81	81	82	88	90	88	77	71	76	80	73	83	86	88	90	..	83.4
	Minimum	50	65	56	58	54	59	58	62	64	66	66	50	42	42	48	53	18	51	59	61	64	69	58	48	46	45	40	43	42	53	..	54.0
Elkins	Maximum	65	67	69	72	79	83	84	83	86	86	78	63	72	73	78	74	72	74	82	82	81	73	62	68	72	66	76	79	80	81	..	75.3
	Minimum	46	42	44	45	52	54	53	57	59	65	61	43	39	39	42	51	45	46	60	61	58	62	51	47	47	42	36	38	35	43	..	48.8
Fairmont§	Maximum	76	78	79	76	85	90	93	92	92	90	82	71	79	80	80	81	78	80	88	89	89	77	68	76	79	69	83	87	87	85	..	82.0
	Minimum	54	48	48	49	51	55	56	62	64	67	67	53	44	45	48	52	49	49	50	60	64	65	58	47	49	43	41	42	43	44	..	52.2
Glenville	Maximum	78	80	80	83	89	93	95	95	95	93	83	84	83	85	86	84	84	80	91	90	89	88	76	77	85	80	86	90	91	91	..	86.1
	Minimum	48	47	48	50	55	56	58	62	62	65	66	49	44	44	49	56	50	49	55	58	62	69	58	48	44	38	41	44	42	51	..	52.3
Grafton	Maximum	74	75	77	77	85	90	91	92	93	93	83	81	79	80	..	..	..	82	85	88	91	81	75	77	80	78	82	88	88	84	..	83.3
	Minimum	50	45	47	48	53	55	57	60	62	65	66	50	42	42	..	..	..	45	50	65	60	67	57	48	46	43	37	40	36	50	..	51.3
Lost Creek	Maximum	70	70	75	73	83	88	93	88	93	89	79	75	74	80	82	81	75	74	82	87	88	73	73	71	76	73	76	85	85	81	..	79.7
	Minimum	47	45	44	46	52	52	55	59	63	65	68	48	39	37	43	53	42	45	52	63	64	69	57	48	54	41	36	39	36	50	..	50.4
Mannington	Maximum	71	71	74	71	79	84	86	86	88	84	79	77	71	75	75	75	75	74	84	84	84	74	69	72	76	74	74	78	80	79	..	77.3
	Minimum	49	45	48	48	52	53	59	60	62	67	66	50	41	39	46	51	47	45	52	59	61	68	61	55	48	41	38	40	38	51	..	51.3
Morgantown	Maximum	73	73	75	75	84	85	89	90	88	85	83	81	75	77	79	76	77	78	86	87	87	..	..	..	..	..	..	84	83	82	..	81.3
	Minimum	54	44	46	52	51	57	64	61	70	67	57	52	42	48	50	56	50	48	61	67	69	..	..	..	..	..	..	..	50	56	..	55.3
New Cumberland	Maximum	67	70	80	69	81	87	89	89	89	73	84	68	76	76	80	75	74	77	79	88	81	74	69	76	76	66	77	80	83	75	..	77.6
	Minimum	46	46	45	53	47	51	58	60	66	63	61	52	44	45	53	49	41	43	52	64	67	59	53	48	57	37	37	52	44	59	..	51.7
New Martinsville	Maximum	73	78	81	78	85	91	91	92	94	86	83	78	78	81	75	80	79	77	85	90	85	76	72	77	80	76	81	86	87	77	..	81.7
	Minimum	50	51	51	52	57	57	61	64	66	69	69	52	47	47	51	57	50	47	56	62	66	68	64	50	51	61	44	47	45	57	..	55.6
Parkersburg	Maximum	71	75	78	72	83	90	89	90	94	91	81	70	73	79	84	78	77	77	86	89	86	78	70	76	80	68	79	83	85	80	..	80.4
	Minimum	54	48	50	53	55	59	63	65	69	71	64	55	46	45	53	58	52	57	65	68	72	60	57	51	58	49	45	51	52	60	..	56.8
Parsons	Maximum	69	71	70	75	81	84	87	87	87	87	80	65	73	75	81	81	72	75	86	84	85	75	69	70	74	78	78	82	83	84	..	78.2
	Minimum	53	45	45	48	53	53	56	55	58	65	60	53	42	42	42	43	45	50	50	64	52	63	45	45	40	35	36	39	32	43	..	48.1
Philippi	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Pickens	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Terra Alta	Maximum	64	64	68	69	76	80	84	82	84	82	75	67	68	71	71	70	68	75	82	80	79	70	65	65	69	65	70	75	78	79	..	73.2
	Minimum	50	40	46	47	52	53	58	60	62	63	64	48	38	38	44	54	47	38	44	66	62	64	52	46	49	39	40	42	45	49	..	50.0
Wellsburg	Maximum	68	70	78	71	81	88	89	89	89	87	83	68	74	76	79	75	76	78	80	86	85	74	68	74	70	68	77	80	82	75	..	78.1
	Minimum	45	48	48	49	48	49	55	59	62	66	62	50	42	44	50	51	49	42	52	65	62	60	55	44	54	40	37	40	42	54	..	50.8
Weston	Maximum	72	74	77	76	83	88	89	89	90	91	81	78	77	82	80	81	80	79	87	86	87	74	74	74	77	76	80	84	84	85	..	81.2
	Minimum	51	46	47	49	54	55	58	61	64	66	69	52	42	47	41	56	50	48	56	63	67	69	57	49	50	46	41	43	41	52	..	53.0
Wheeling§	Maximum	79	77	85	71	85	94	95	95	94	81	87	74	80	82	89	81	84	81	83	91	85	77	71	81	84	75	85	89	88	70	..	83.2
	Minimum	48	49	49	49	55	55	56	62	64	66	68	52	45	45	48	54	50	50	50	62	65	68	57	46	46	43	43	45	47	50	..	52.9
Southern Division.																																	
Beckley	Maximum	74	75	76	70	84	89	88	71	71	69	60	72	77	79	79	78	88	73	88	82	82	83	80	72	70	76	77	70	72	76	..	76.7
	Minimum	56	41	40	52	57	51	60	48	43	45	40	47	43	49	48	46	49	48	53	47	49	49	48	47	41	45	46	58	34	44	..	47.5
Bluefield	Maximum	72	70	73	77	82	84	82	83	86	87	82	80	74	77	81	82	78	75	82	83	84	83	73	69	74	74	75	76	79	84	..	78.7
	Minimum	44	44	43	46	53	58	57	57	57	60	65	53	42	46	50	56	47	53	59	66	63	61	55	50	42	46	46	42	44	44	..	51.6
Charleston	Maximum	74	79	80	82	87	87	94	95	92	96	96	90	87	89	91	85	92	91	92	92	92	87	86	89	83	84	85	85	88	90	..	87.7
	Minimum	55	50	51	51	53	59	60	65	65	66	67	55	56	52	48	53	54	62	64	65	65	69	62	60	50	49	49	46	45	46	..	56.4
Elkhorn	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Green Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Hinton§	Maximum	72	73	75	79	83	86	87	86	89	93	86	71	81	82	86	83	79	74	86	88	85	79	66	77	81	76	80	82	83	88	..	81.2
	Minimum	54	50	48	48	52	56	58	60	63	66	59	50	45	46	51	54	54	55	56	60	63	65	52	48	47	45	45	43	43	43	..	53.3
Holcomb§	Maximum	69	70	71	76	82	85	88	85	86	89	79	65	74	76	80	76	74	72	82	84	83	74	69	68	74	69	76	78	81	82	..	77.2
	Minimum	52	49	39	42	42	51	52	53	55	59	59	49	39	53	43	48	45	45	45	46	46	63	54	48	39	39	39	36	37	..	..	46.9
Huntington§	Maximum	78	80	84	81	87	92	91	93	91	96	85	75	80	82	90	77	82	84	87	90	86	77	72	78	82	80	83	86	86	86	..	84.0
	Minimum	55	51	51	51	52	59	59	64	68	69	69	55	50	49	49	57	54	54	60	66	69	70	60	51	51	52	45	45	51	51	..	56.2
Lewisburg	Maximum	75	77	72	77	82	85	87	84	85	88	81	75	73	76	79	77	74	73	83	82	82	78	69	69	74	72	72	75	77	81	..	77.6
	Minimum	46	43	40	45	54	53	54	56	56	64	63	51	39	38	43	53	45	50	53	62	56	64	56	45	39	42	41	39	34	40	..	48.8
Marlinton	Maximum	68	64	68	70	74	80	78	82	80	78	80	72	68	70	74	70	72	76	74	76	76	70	60	62	68	64	64	66	70	76	..	71.7
	Minimum	44	42	38	42	52	50	52	54	55	54	56	48	42	44	50	52	40	44	48	54	56	58	52	40	38	40	34	35	33	38	..	46.3
Point Pleasant	Maximum	76	79	83	80	88	93	93	96	94	94	85	75	79	82	91	84	83	77	87	92	88	79	78	80	83	78	84	88	88	89	..	84.7
	Minimum	50	48	47	51	54	57	59	61	66	66	68	51	44	45	51	54	52	56	63	65	70	69	57	48	51	46	40	48	48	58	..	54.9
Powellton	Maximum	..	69	69	70	75	77	86	80	81	87	81	79	69	70	77	77	74	72	80	86	73	75	75	65	76	65	71	74	68	80	..	75.2
	Minimum	..	47	47	49	55	47	59	58	62	64	68	58	48	45	50	54	50	55	62	64	63	68	59	50	40	49	43	48	46	50	..	53.9
Robertsburg§	Maximum	73	78	80	80	87	93	93	92	91	91	86	72	83	81	83	80	77	87	90	89	85	77	76	78	81	75	85	86	89	88	..	84.5
	Minimum	54	48	47	50	52	56	59	61	64	66	66	51	46	45	45	46	52	60	64	67	67	67	60	49	49	50	41	45	47	48	..	54.0
Ryan	Maximum	74	77	79	82	86	89	89	91	92	92	82	73	86	85	86	81	81	76	88	89	86	75	71	75	77	75	80	84	86	88	..	82.5
	Minimum	48	43	43	49	51	53	57	60	61	64	64	49	47	40	47	49	45	51	58	60	64	67	60	46	44	45	33	40	52	60	..	51.7
Spencer§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Sutton	Maximum	59	66	66	74	75	77	84	84	82	81	81	..	..	70	71	85	73	73	80	80	91	72	72	..	85	70	68	68	..	75	..	75.5
	Minimum	53	46	46	48	46	63	67	62	62	60	61	..	..	45	46	55	60	51	57	60	62	66	57	..	48	46	41	44	..	41	..	53.6
Union§	Maximum	73	74	74	80	84	88	89	90	90	90	89	80	78	80	85	86	87	86	85	85	86	84	73	73	78	76	75	76	82	86	..	82.1
	Minimum	50	42	40	44	54	53	56	55	55	59	65	46	40	41	49	50	51	52	50	62	61	57	57	46	37	42	44	40	36	39	..	49.1
White Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Williamson§	Maximum	71	72	76	80	82	86	86	88	88	90	85	76	75	76	85	81	80	75	84	84	84	80	67	70	75	71	78	78	79	83	..	79.3
	Minimum	56	54	53	53	54	60	63	66	68	68	70	56	52	52	52	58	59	59	58	60	66	65	61	56	54	53	51	51	53	54	..	57.9

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Based on 850 records.
Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.
W. T.

INYE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

OCTOBER, 1919

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
DECEMBER 10, 1919

Departure of the Mean Temperature from the Normal, October, 1919.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXVII. PARKERSBURG, W. VA., OCTOBER, 1919. NO. 10

GENERAL SUMMARY.

The past month was the warmest, wettest, and cloudiest October of record for the State. The average precipitation exceeded 5 inches for only two other fall months. For September, 1900, the average was 5.20 inches and for October, 1911, 5.28 inches, while the average for the past month was 5.84 inches. The rainfall was favorably distributed over the State and throughout the month. The temperature was below the normal for only six or seven days and the lowest recorded was 28°. The month closed without frosts in most of the agricultural districts. The rivers were at moderate stages from the 15th to the 21st and were rising at the close of the month. Winter grains made excellent growth but corn and buckwheat were damaged by the wet weather. The conditions were unfavorable for outdoor work.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.12 and 30.13 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.40 inches on the 29th, and 29.90 inches on the 28th. Elkins, 30.40 inches on the 30th, and 29.90 inches on the 21st.

TEMPERATURE.

The monthly mean for the State, determined from 44 stations, was 62.3°. The departure from the normal for 40 stations having ten or more years of record was +7.6°. The first ten and the last eight days, except the 29th, were abnormally warm, with the highest temperatures occurring on the 2d and 3d. The temperatures were generally slightly below the normal on the 12-13th, 17-20th, 22d, and 29th, with the lowest readings on the 13th and 19th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 85 per cent; 8 p. m., 78 per cent. The October averages for the same hours for the past 31 years are 83 and 70 per cent, respectively. Elkins, 8 a. m., 90 per cent; 8 p. m., 82 per cent. The October averages for Elkins for the same hours for the past 19 years are 89 and 78 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, determined from 64 stations was 5.84 inches. The departure from the normal for 45 stations having ten or more years of record was +3.18 inches. The rainfall was lightest over the eastern panhandle and southern counties, and heaviest over the central, central-western, and northern counties. The heaviest fall, 11.88 inches, occurred at Pickens, Randolph County. General rains fell on the 5-6th, 9th, 11-12th, 14-17th, 21st-24th, 26-27th, and 30th-31st, with the heaviest amounts on the 11-12th, 14-15th, 24th, and 27th. There was no snowfall.

WIND.

The average wind velocity at Parkersburg was 4.6 miles per hour, or 0.3 mile below the October average for 29 years. The average at Elkins was 4.5 miles per hour, or 1.1 miles above the October average for 20 years. The highest velocity at Parkersburg was 26 miles per hour from the west on the 28th, and at Elkins 26 miles per hour from the south on the 9th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 38 per cent of the possible amount, or 12 per cent below the October average for 22 years. The average at Elkins was 27 per cent, or 20 per cent below the October average for 20 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 1st, 2d, 3d, 7th, 8th, 9th, 10th, 11th, 18th, 19th, 20th, and 21st; Creston, 2d, 7th, 8th, 13th, 18th, 19th, 20th, 22d, and 25th; Elkins, 1st, 2d, 5th, 8th, 13th, 18th, 19th, and 20th; Grafton, 7th and 20th; Hinton, 3d, 8th, 10th, 16th, and 27th; Holcomb, 19th and 20th; Lewisburg, 19th; Mannington, 2d, 4th, 7th, 8th, 18th, 19th, 20th, and 22d; Marlinton, 1st, 2d, 3d, 8th, 18th, 19th, and 20th; New Cumberland, 2d, 3d, 4th, 7th, 13th, and 18th; Pickens, 12th; Robertsburg, 1st, 2d, 7th, 18th, and 20th; Romney, 25th; St. Marys, 2d, 7th, 13th, 19th, 20th, and 22d; Smithfield, 7th, 8th, 18th, 19th, 20th, 21st, 22d, and 23d; Terra Alta, 8th; Wardensville, 1st, 12th, 19th, and 29th; Wellsburg, 20th; Wheeling, 2d, 3d, 7th, 8th, 18th, 19th, 20th, 23d, and 24th.

Frost, light: Beckley, Lost Creek, and Union, 19th; Mannington, 29th; Morgantown, 13th, 19th, and 29th; Parkersburg, 13th, 18th, and 19th; Pickens and Wardensville, 18th; Wellsburg, 8th.

Frost, killing: Burlington, Romney, and Upper Tract, 19th; Ryan, 20th; Terra Alta, 18th.

Halos, solar: Elkins, 8th and 19th.

Thunderstorms (dates and number of stations reporting): 1st, 1; 5th, 1; 10th, 2; 11th, 1; 16th, 5; 25th, 1; 26th, 3.

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	51.5	95	21	1.97	2.91	T.	...	..	..	..
1892	52.6	89	24	0.83	1.45	0.21	....	..	..	..
1893	54.1	86	16	4.74	7.22	1.00	....	21	6	4
1894	54.4	88	22	2.32	3.85	1.17	T.	16	8	7
1895	48.1	89	8	1.29	2.25	0.16	T.	22	5	4
1896	51.0	82	20	2.08	4.37	0.45	T.	14	9	8
1897	58.2	95	22	0.53	2.27	0.07	0	18	7	6
1898	55.6	95	19	4.84	8.50	2.48	T.	11	10	10
1899	55.8	91	19	1.42	3.81	0.23	0	15	7	9
1900	60.9	97	24	2.33	4.80	1.15	0	16	8	7
1901	54.3	86	19	0.54	1.95	0.12	0	19	6	6
1902	56.5	87	17	2.63	5.50	0.90	T.	16	8	7
1903	54.2	96	15	2.55	4.75	0.80	T.	17	7	7
1904	54.5	92	16	1.59	3.02	0.37	T.	18	8	5
1905	54.2	95	19	4.71	8.26	2.46	T.	13	8	10
1906	54.5	86	12	3.09	8.15	1.64	1.3	11	6	14
1907	50.3	87	19	2.65	5.12	0.54	0.1	15	9	7
1908	55.1	91	16	1.60	6.86	0.33	T.	18	7	6
1909	50.0	88	14	2.79	5.27	0.60	0.1	16	7	8
1910	58.1	95	15	1.85	2.96	0.80	0.7	18	7	6
1911	56.3	88	23	5.28	9.65	3.27	0	12	7	12
1912	55.5	93	20	1.34	3.10	0.20	T.	18	7	6
1913	54.5	92	12	4.50	8.11	1.78	0.3	12	6	13
1914	57.3	91	14	2.94	6.72	1.37	T.	12	8	11
1915	55.6	89	20	4.11	5.55	0.74	T.	17	7	7
1916	54.1	97	16	2.38	4.35	0.91	T	19	5	7
1917	49.2	89	16	4.35	6.49	1.18	5.5	15	6	10
1918	58.2	89	21	3.68	7.53	1.59	T.	15	7	9
1919	62.3	102	28	5.84	11.88	2.13	0	9	7	15
Means and extremes ..	54.8	102	8	2.79	11.88	T.	0.3	16	7	8

Climatological Data for October, 1919.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	3	63.2	.....	91	2	29	19	43	2.46	.....	0.95	0	7	17	7	7	s.	Elmer Keister.
Burlington	Mineral	875	25	59.0	+ 5.5	87	3	32	19†	36	3.81	+1.61	1.00	0	12	6	18	7	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	30	.....	.....	.....	.....	.....	.....	.....	3.07	+0.23	0.70	0	7	.....	.....	.....	e.	S. W. Lightner.
Martinsburg	Berkeley	435	27	58.9	+ 4.5	90	3	36	13	36	3.76	+1.17	.....	0	14	12	7	12	e.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	23	64.0	+ 9.3	102	2	33	19	46	3.01	+0.81	1.50	0	10	27	0	4	.....	M. S. Henkel.
Piedmont	Mineral	919	6	60.2	.....	89	1	35	19†	37	4.59	.....	0.93	0	19	6	17	8	se.	C. A. Suter, Jr.
Romney	Hampshire	824	21	62.8	+ 8.0	93	3	32	19	41	4.30	+1.91	1.22	0	11	6	12	13	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	20	63.3[b]	+ 7.7	92[c]	2†	32[c]	19†	52	2.90	+0.62	1.00	0	7	8	6	17	w.	J. M. Mallow.
Wardensville	Hardy	1,200	1	57.8[g]	.....	90[g]	2	29[g]	18	40[g]	3.31	.....	1.30	0	.....	13[f]	3[f]	9[f]	w.	Luther F. Sutton.
Averages and	extremes	.....	.....	61.2	+ 7.0	102	2	29	18†	52	3.47	+1.06	1.50	0	11	12	9	10	w.	
Northern Division.																				
Bens Run	Pleasants	622	17	64.2	+ 7.9	91	2†	39	13	31	6.70	+4.54	1.15	0	19	14	7	10	.....	J. D. Riggs.
Brandonville	Preston	1,809	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	22	61.5	+ 8.4	84	2	36	18†	30	6.74	+3.50	2.00	0	12	8	10	13	.....	H. A. Darnall.
Cortland	Tucker	3,300	3	.....	.....	.....	.....	.....	.....	.....	5.18	.....	0.95	0	11	.....	.....	.....	...	Samuel Harmon.
Creston	Wirt	701	17	64.0	+ 8.7	92	2†	35	19	37	7.40	+4.71	1.58	0	15	8	3	20	sw.	J. M. Reed.
Davis	Tucker	3,093	10	.....	.....	.....	.....	.....	.....	.....	7.30	.....	.....	0	.....	.....	.....	.....	.....	Branson Harper.
Elizabeth	Wirt	646	7	.....	.....	.....	.....	.....	.....	.....	6.72	.....	1.23	0	11	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	18	60.3	+ 8.9	85	2	34	19	31	5.69	+3.27	1.23	0	20	3	5	23	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	15	62.3	+ 7.2	91	2	38	13†	39	5.86	+3.27	1.29	0	15	12	4	15	w.	F. P. Hall.
Glenville	Gilmer	738	25	65.4	+10.0	95	3†	39	19†	37	7.52	+4.62	2.40	0	13	8	14	9	w.	Howard R. Brannon.
Grafton	Taylor	1,000	26	63.2	+ 8.0	93	2	35	13	37	5.35	+2.55	.....	0	15	8	11	12	nw.	W. C. Byers.
Lost Creek	Harrison	1,026	21	62.0	+ 7.6	91	3	33	13	35	6.16	+3.64	1.60	0	11	11	6	14	w.	Allen Smith.
Mannington	Marion	974	16	61.0	+ 7.2	86	2	34	13	31	6.51	+3.84	1.28	0	20	8	5	18	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	26	62.2[c]	+ 7.0	88[b]	2†	32[c]	13	40[c]	7.17	+4.07	0.90	0	14	4[b]	4	21[b]	s.	Prof. E. L. Andrews.
Moundsville	Marshall	642	16	62.3[a]	+ 6.4	90[a]	1†	36	12	39[a]	5.99	+3.15	0.87	0	12	10	6	15	sw.	M. Z. White.
New Cumberland	Hancock	987	21	60.2[a]	+ 6.0	89[a]	3	29[a]	13	35[a]	6.55	+3.83	1.17	0	18	10	11	10	sw.	M. F. Smith.
New Martinsville	Wetzel	634	25	64.4	+ 7.6	92	2	36	13	32	7.10	+4.51	1.20	0	17	11	7	13	s	Wm. Ankrom.
Parkersburg	Wood	638	32	63.4	+ 8.7	91	2	39	13	28	5.37	+2.93	1.18	0	17	4	10	17	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	19	60.4	+ 7.8	87	3	34	19†	43	6.98	+4.24	.....	0	.....	8	11	12	.....	J. W. Swisher.
Philippi	Barbour	1,149	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Attie G. Robinson.
Pickens	Randolph	2,697	16	60.0	+ 7.8	89	2	32	18	37	7.88	+5.10	2.00	0	21	8	7	15	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	32	.....	.....	.....	.....	.....	.....	.....	7.89	+5.03	1.64	0	15	.....	.....	.....	e.	J. F. Pierce.
Saint Marys	Pleasants	577	10	.....	.....	.....	.....	.....	.....	.....	5.02	+1.56	1.40	0	16	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	13	58.9	+ 5.4	86	3	34	13	32	5.78	+2.43	1.42	0	15	15	8	8	sw.	G. M. Wnisler.
Terra Alta	Preston	2,612	18	57.8	+ 6.1	82	2	32	13	30	7.21	+3.83	1.18	0	20	6	5	20	w.	W. J. Grimm.
Wellsburg	Brooke	1,225	18	59.6	+ 6.1	87	2	32	13	32	6.16	+3.40	1.00	0	17	9	6	16	w.	George P. Prister.
Weston	Lewis	1,026	23	64.2	+ 9.3	91	3	38	13†	33	7.20	+4.41	1.60	0	14	1	11	19	.....	Weston State Hospital
Wheeling	Ohio	645	32	61.6	+ 6.7	95	2†	39	13†	39	5.69	+3.27	0.90	0	18	11	7	13	w.	Miss M. B. Forsyth.
Averages and	extremes	.....	.....	61.9	+ 7.6	95	2†	29	13	43	6.66	+3.86	2.40	0	16	8	8	15	w.	
Southern Division.																				
Bancroft	Putnam	574	15	63.4	+ 6.0	90	2	40	18†	33	6.75	+3.36	1.23	0	12	17	0	14	nw.	R. E. Dent.
Beckley	Raleigh	2,440	19	62.4	+ 8.0	88	2	35	19	39	6.57	+4.18	1.41	0	10	9	10	12	w.	John A. Ewart.
Bluefield	Mercer	2,558	24	63.8	+ 8.3	87	2	36	20	32	6.49	+3.81	1.55	0	14	8	12	11	.....	Norfolk & Western Ry.
Breading	Mingo	507	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	4	.....	.....	.....	.....	.....	.....	.....	8.71	.....	.....	0	14	8	1	22	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	16	67.2	+ 8.8	95	2	41	19	42	6.25	+3.39	1.45	0	12	2	0	29	w.	C. V. Lewis.
Clay	Clay	706	3	.....	.....	.....	.....	.....	.....	.....	5.42	.....	1.30	0	14	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	17	65.6	+10.8	100	2	34	13	45	6.68	+3.84	2.00	0	14	6	16	9	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	3	.....	.....	.....	.....	.....	.....	.....	4.85	.....	1.15	0	16	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	3	.....	.....	.....	.....	.....	.....	.....	5.27	.....	1.03	0	16	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	4	.....	.....	.....	.....	.....	.....	.....	5.93	.....	2.00	0	12	.....	.....	.....	nw.	Lockmaster.
Dam 26 O. R.	Mason	505	3	.....	.....	.....	.....	.....	.....	.....	5.96	.....	1.58	0	15	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans	Jackson	606	7	63.6	.....	87	2	41	13†	27	5.82	.....	1.78	0	15	6	7	18	.....	B. F. Sayre.
Gary	McDowell	1,426	3	.....	.....	.....	.....	.....	.....	.....	8.02	.....	.....	0	.....	.....	.....	.....	.....	U. S. Coal & Coke Co.
Gassaway	Braxton	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.15	.....	0.92	0	5	.....	.....	.....	.....	W. H. Gutnn.
Green Sulphur Spgs.	Summers	1,600	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. A. Hays.
Hinton	do	1,450	22	64.3	+ 7.8	92	2	40	19†	47	5.20	+2.80	1.16	0	16	8	1	22	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	7	.....	.....	87	2	.....	.....	.....	7.02	.....	1.57	0	16	9	0	22	.....	W. C. Williams.
Huntington	Cabell	538	25	62.4	+ 6.3	92	2	41	19	32	4.94	+2.57	1.48	0	16	9	3	19	.....	L. H. Hutchinson.
Kanawha Falls	Fayette	618	0	.....	.....	.....	.....	.....	.....	.....	6.53	.....	2.50	0	8	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	3	.....	.....	.....	.....	.....	.....	.....	6.50	.....	1.46	0	16	.....	.....	.....	.....	Cabin Creek Con.Coal Co.
Lewisburg	Greenbrier	2,200	19	61.2	+ 7.9	87	2	31	19	36	4.99	+2.35	2.08	0	11	11	7	13	nw.	Geo. T. Argabate.
Logan	Logan	687	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	20	56.2	+ 5.8	82	2	28	19	32	4.43	+1.57	1.82	0	13	2	17	12	sw.	S. L. Brown.
Point Pleasant	Mason	553	26	64.8	+ 7.5	94	2†	38	13†	35	6.88	+4.38	2.00	0	19	7	5	19	.....	W. D. Holmes.
Powellton	Fayette	933	23	.....	.....	.....	.....	40	19	.....	6.69	+1.57	1.52	0	14	15	8	8	.....	Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	3	.....	.....	.....	.....	.....	.....	.....	5.13	.....	1.59	0	15	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick ††	Greenbrier	1,653	3	.....	.....	.....	.....	.....	.....	.....	4.80	.....	2.00	0	9	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	19	64.0	+ 6.8	94	2	39	19	38	5.36	+2.71	1.45	0	13	8	2	21	.....	E. C. Brace, Jr.
Ryan	Roane	700	16	63.2	+ 8.8	91	2	32	20	38	6.86	+3.72	1.50	0	20	8	7	16	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. M. McKown.
Sutton	Braxton	839	13	.....	.....	.....	.....	37	20	.....	2.13	−1.60	0.75	0	8	8	9	8	.....	Lawrence Freeman.
Union	Monroe	2,250	15	63.2	+ 9.8	90	2	32	19	42	5.15	+2.44	1.32	0	6	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Ayres.
Williamson	Mingo	660	19	65.9	+ 7.5	87	2	45	21	29	5.82	+3.29	1.50	0	16	14	5	12	w.	J. F. Keyser.
Averages and	extremes	.....	.....	63.4	+ 7.9	100	2	28	19	47	5.84	+3.01	2.50	0	13	9	6	16	w.	
State averages and	extremes	.....	.....	62.3	+ 7.6	102	2	28	19	52	5.84	+3.18	2.50	0	14	9	7	15	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[c] Approximated by the observer.

Daily Precipitation for October, 1919.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac																																
Brandywine	do						.05						.95		T.	.18	.03						.05	.75	.45				T.				2.46
Burlington	do	.50				.10	.08			.10		*	1.00		.60	T.	T.					.45		.20	.42			.26		T.		.10	3.81
Harpers Ferry ‖‖	do		.50				T.			T.			.60	.55		.20	T.							.70	.50	.02						3.07
Martinsburg	do	*	.24				.23			.10	.12	*	1.02		.54		.10						*	1.14		*	.15				.12	3.76
Moorefield	do					T.	.10			.09			1.50			.36	.06	.04				.06	.56	.22			.02					3.01
Piedmont	do	.93			T.	.03	.05	T.	T.	.11	.09	.28	.58		.65	.20	.09	.04				.03	.29	.41	.34	.08	.05	.19	T.		T.	.15	4.59
Romney	do	.57					.22			.25			.52		1.00		.03	T					.15		1.22		*	.28		T.		.06	4.30
Upper Tract	do									.15			1.00		.30	.10	T.						.20	.40	.75								2.90
Wardensville ‖‖	do	.03				.05			.07			1.30	.20		.16	.13						.10	.50	.40	.20	‖	*	*	*	*	*	.17	3.31
Northern Division.																																	
Bens Run	Ohio				.13	.05	.81			.12	.03	.44	.86		.73	.58	.67	.15				.16	.15	.15		.03	.10	.35	.04			1.15	6.70
Brandonville ‖‖	Monongahela																																
Buckhannon	do				T.	T.	.37			T.	T.	.30	1.00		2.00	.60	.75	.15				.30	.15	.22			.30	.60			T.	6.74
Central Station	Middle Is. Creek																																
Cortland ‖‖	Monongahela										.68		.95	.15		.19	.70						.62	.42	.40		.36			.10		.61	5.18
Creston ‖‖	Little Kanawha				T.	T.	.71			T.	.08	.05	.95		.50	1.58	.25	.37					1.01	.07	.04		.10	1.54	.10			.05	7.40
Davis ‖‖	Monongahela																																
Elizabeth ‖‖	Little Kanawha						.65						1.23		.90	1.18	.45	.18					.78	.06	.06			1.01				.22	6.72
Elkins ***	Monongahela		T.		.03	.02	.32			.13	.01	.36	.68		1.12	.22	.51	.06				.42	.10	.71	.21	T.	.12	.35	.02	T.	.03	.26	5.69
Fairmont ‖‖	do	T.	T.			.05	.32	T			.13	.01	1.25	T.	.05	1.26	.12	.69					.72	.03	.09			.55	.26	T.	T.	.31	5.86
Glenville ‖‖	Little Kanawha					.08	.20			.12			1.10		.20	2.40	.28	.68					.78	.20	.12		.08	1.20			T.		7.52
Grafton	Monongahela				T.		.25			.09	.08	.25	*		*	1.58	.70						*	.81	.23		.13	.97	T.		.11	.15	5.35
Lost Creek	do				T.	T.	.38			.06		T.	1.12		1.60	.19	1.10	.05				.81		T.		T.		.69	T.	T.	.04	.12	6.16
Mannington	do	.04	T.			.22	.51			.15	T.	.38	.90		1.00	.48	.54	.09				.13	.48	.05	.02	.01	.32	.12	.16		.08	.83	6.51
Morgantown	do	.35				T.				.90		.38	.85		.80	.35	.72	.10				T.	.60	.75			T.	.48	.15		.22	.52	7.17
Moundsville ‖‖	Ohio	.22			.10	.70			.35			.80		.10	.85	.87						.15					.45	.65				.75	5.99
New Cumberland	do	.23				.15	.65			.35	.46	.77	.15		.31	.30	1.17	.36				.15				T.	.43	.32	.14	.07	.05	.49	6.55
New Martinsville	do	.02			.10		1.10			.20		.40	.70		.80	.33	.95		.05			.20	.15	.10			.50	.20	.10			1.20	7.10
Parkersburg ***	Ohio				.10	.45	.22		T.	.20		.71	.27		.84	.27	.46					.16		.02		.04	.17	.26	.05	T	.08	1.07	5.37
Parsons	Monongahela				*		.60			*	T.	1.20	*		2.00	*	*					.63		1.50		*		1.05	T.	*		T.	6.98
Philippi	do																																
Pickens	do				.10	.19	1.60			.15	.10	.25	2.00	.19	1.89	.39	1.10	.83				.38	1.07	.65	.22	.17	.07	.26				.27	11.88
Rowlesburg ‖‖	do						.36	.11		.12	.21	.08	1.32	.05		1.64	.37	.66					1.28	.22	.48			.85	.14	T.			7.89
Saint Marys ‖‖	Ohio				.03	.05	.58			T.	.15	T.	1.40		.20	.68	.28	.60	T.				.46	.05	.03		T.	.38	.05	.03	T.	.05	5.02
Smithfield ‖‖	Fishing Creek						1.42			.05		.01	1.27		.04	1.16	.24	.34					.56	.07	.04			.26	.23	.02		.07	5.78
Terra Alta	Monongahela	.28			T.	T.	.35			.13	.11	.39	.80		1.18	.33	.90	.22	.01			.10	.57	.44	.07		.15	.77	.13		.09	.19	7.21
Wellsburg	Ohio	.52				.10	.60			.32	.06	.53	.29		.33	.35	1.00	.21					.20				.13	.51	.10		.25	.66	6.16
Weston	Monongahela				.05		.40			.15		.75	1.00		1.60	.30	.45	.30				.70	.20	.10			.10	1.10					7.20
Wheeling ‖‖	Ohio	.02	.55			.05	.62			.26	.06	.18	.63		.01	.71	.05	.90					.05	T.			T.	.72	.80	.01	.06	.01	5.69
Southern Division.																																	
Bancroft ‖‖	Great Kanawha						.64			.09			1.23		.47	1.23	1.03	.43					.60	.10	.47		.10	.36					6.75
Beckley	do			.55			.57					1.41	.86		.70		.76						.70	.22	.06							.74	6.57
Bluefield	do				.68	.10	.60			.18			1.55	.20	.95	.42	.13					.03	.22	.93	.40	.10							6.49
Breading	do																																
Camden-on-Gauley ‖‖	do				.20	1.00				.20		*	1.60	.80	*	2.00	*	1.00				.11		.80		T.		.20			.80	8.71
Charleston ‖‖	do				T.	.20	.60						1.45	.10	.30	.80	.75	.35					.50	.25	.45			.50					6.25
Clay ‖‖	do					.10	.64	.03					1.30	.10	.15	.60	.40	.25					.80	.15	.34			.55		.03			5.42
Cuba	Sand Creek					.15	.43			.20		.20	.90		2.00	.55	.30					.30		.10			.25	.50	T.		.20	.60	6.68
Dam 19 O. R. ‖‖	Ohio				T.	.01	.80			.08	.18	T.	1.15		.16	.78	.30	.60					.20	T.			.04	.37	.04	.02	.02	.10	4.85
Dam 20 O. R. ‖‖	do					.05	.66	.10		.03	.26		.95	T.	.46	1.03	.12	.46					.29	.03				.63	.06		.01	.13	5.27
Dam 22 O. R. ‖‖	do						.50					.15	1.20	T.	.15	2.00	.14	.45							.10			1.06	T.	.05	.03	.10	5.93
Dam 26 O. R. ‖‖	do						.38			.05	.08		1.00	.06	.62	1.58	.15	.25					.83		.13		.10	.52	.19			.02	5.96
Elkhorn	Big Sandy																																
Evans	Ohio						.56			.09		.03	.81		1.78	.22	.38					.59		.19	.16	T.	.35	.37	.04		.07	.18	5.82
Gary ‖‖	Big Sandy			*	*	1.95	.15		.26			*	*	1.37	.50	*	1.00	.65				*	.06	.73	1.15	.20							8.02
Gassaway ‖‖	Great Kanawha													.87	.63	.31	.42						.92										3.15
Green Sulpr. Spgs.	do																																
Hinton ‖‖	do				.04		.60	.24		.12	.16	.14	1.16	.80	.18		.50	.10					.06	.80	.40	.08	.02						5.20
Holcomb ‖‖	do				.22	.10	.68			.24		.60	1.57		.44	.59	.24	.43					.23	.34	.89	.03		.37	.05				7.02
Huntington ‖‖	Ohio					.02	.46			.04			.98	.04	.14	1.10	.38	.24					.42	.10	.20		.24	.50	T.	.05		.03	4.94
Kanawha Falls ‖‖	Great Kanawha						1.00						2.50	.38	.50	.25	.40	.90					T.	T.	.60			T					6.53
Kaylord ‖‖	do				.83		.54	.15				.10	1.46	.12	.20	.42	.77	.02					.27	.37	1.03	.02	*	.20		T.			6.50
Lewisburg	do					.22	.69			.13			2.08		.15	.39	.22	.02				T.	.11	.62	.36	T.							4.99
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do				T.	.06	.48			.20	T.	.70	1.12	T.	.22	.08	.12					.03	.02	.76	.60	.04	T.	T.	T.				4.43
Point Pleasant	Ohio					.26	.72			.30		.30	1.12		2.00	.30	.23	.04				.38	.12	.04	.04	.03	.42	.18	.06		.20	.14	6.88
Powellton	Great Kanawha				.91	.20	.55				.03	.20	1.52		.38	.62	.14	.56					.21	.56	.58	.23							6.69
Raleigh ‖‖	do				.17	.05	.55	.18		.08	.05		1.59	.61		.19	.70	.32					.12	.41	.05	.06							5.13
Renick ‖‖	do					.10	.40		.20				2.00		.10	.45	.25							.90		.40								4.80
Robertsburg ‖‖	do						.67				.10		.90	.02	.35	1.45	.30	.20					.56	.10	.15		.08	.48					5.36
Ryan	do				.08	.23	.83			.06		.27	.91		1.50	.22	.91	.04				.46	.18	.11	.18	.13	.57	.12	.01	T.	.02	.03	6.86
Sissonville ‖‖	do																																
Spencer ‖‖	Little Kanawha																																
Sutton	Great Kanawha				.10		.55							.11		.75						.08	.14	.30		.10							2.13
Union	do				.17		1.19			.17			1.25			1.05									1.32								5.15
White Sulphur Spgs.	do																																
Williamson ‖‖	Big Sandy				.10	.08	.35	.24					1.50	.21	.35	.42	.95	.55					.30	.30	.40	.02	.04	.01		T.			5.82

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for October, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Brandywine	Maximum	83	91	90	85	84	80	73	80	84	85	87	74	75	72	78	82	77	73	72	70	69	67	60	56	68	85	85	80	70	75	82	77.2
	Minimum	46	58	56	52	53	64	45	50	52	54	55	45	38	47	56	56	52	45	29	30	40	46	50	50	51	55	57	58	40	45	52	49.3
Burlington	Maximum	70	82	87	81	79	80	74	60	68	83	82	67	58	54	67	82	66	60	68	60	68	65	58	56	64	77	82	79	54	64	80	70 2
	Minimum	52	52	55	54	59	65	47	42	44	56	54	46	38	50	52	53	49	43	32	32	35	47	44	46	51	47	59	52	35	39	49	47.7
Martinsburg§	Maximum	60	73	90	85	83	81	78	58	63	86	85	49	59	55	67	80	60	62	67	60	68	62	53	55	59	71	81	79	55	66	76	68.6
	Minimum	50	52	54	58	60	64	51	43	44	51	55	48	36	38	50	54	54	41	38	40	43	52	50	50	51	51	54	57	40	41	52	49.2
Moorfield	Maximum	72	102	97	92	85	88	80	76	70	91	88	79	64	60	75	87	84	66	73	67	71	68	64	67	70	85	96	81	64	66	84	77.6
	Minimum	56	56	57	54	69	66	47	48	50	53	58	43	39	50	53	58	54	39	33	38	39	48	49	52	52	49	62	56	38	40	50	50.5
Piedmont	Maximum	89	84	88	81	79	80	75	59	67	84	80	65	58	56	69	84	66	63	72	60	68	66	52	55	61	82	81	76	52	62	77	70.7
	Minimum	55	53	57	56	61	63	46	43	41	57	62	45	38	50	52	65	51	37	35	36	39	49	50	51	52	54	60	48	35	41	53	49.6
Romney	Maximum	85	86	93	90	83	84	78	70	67	87	85	87	75	62	70	85	81	66	73	64	72	66	64	58	65	85	87	80	63	68	83	76.2
	Minimum	57	54	55	52	60	63	58	41	47	61	60	50	37	49	53	58	52	34	32	35	37	50	49	51	51	49	57	54	34	40	50	49.4
Upper Tract	Maximum	90	92	92	84	84	82	82	75	71	..	..	85	80	78	77	82	77	74	72	73	72	71	70	66	84	85	85	84	84	83	87	80.0
	Minimum	58	55	54	53	54	53	51	48	43	..	..	45	42	40	39	57	51	35	32	33	32	32	34	47	45	50	56	58	57	56	59	46.6
Wardensville§	Maximum	85	90	84	86	83	75	60	70	86	85	61	60	63	72	59	59	63	67	65	67	64	64	63	71	..	..	..	..	..	..	..	70.9
	Minimum	54	50	50	53	60	43	45	42	51	52	47	34	34	49	54	55	39	29	34	37	39	39	40	41	46	..	..	..	..	..	42	44.6
Northern Division.																																	
Bens Run	Maximum	90	91	91	89	82	76	77	77	75	85	77	68	67	68	68	72	65	65	68	70	66	62	68	74	69	76	81	72	66	77	71	74.3
	Minimum	64	63	60	65	66	66	49	47	58	64	58	46	39	55	62	63	49	41	41	41	49	44	50	57	55	62	52	51	40	50	62	54.2
Buckhannon	Maximum	80	84	83	80	78	76	68	71	73	80	76	65	66	64	70	75	64	61	61	65	68	60	62	64	74	78	79	72	57	77	75	71.2
	Minimum	57	56	56	59	61	55	46	45	57	65	59	47	40	56	58	61	49	36	36	38	45	47	52	51	52	62	64	50	40	47	60	51.8
Creston	Maximum	90	92	92	90	83	76	78	79	77	88	79	64	68	65	70	77	65	67	72	71	70	65	65	71	70	78	83	79	61	80	77	75.5
	Minimum	59	56	56	60	64	49	46	47	59	60	58	49	36	55	62	63	53	36	35	38	45	44	52	58	60	59	64	57	41	47	60	52.5
Elkins	Maximum	78	85	83	81	77	75	67	71	68	79	73	62	64	67	67	74	63	64	63	66	67	60	58	65	74	78	79	72	55	75	74	70.5
	Minimum	55	56	55	54	56	58	46	43	54	63	58	44	35	52	60	59	41	37	34	35	53	46	49	52	53	61	62	41	38	44	58	50.1
Fairmont§	Maximum	82	91	90	87	80	79	77	77	72	86	77	51	70	63	71	75	61	68	69	72	71	66	61	76	76	78	79	72	59	81	74	73.9
	Minimum	59	58	58	59	61	64	45	44	45	60	63	46	38	39	57	63	49	40	38	40	42	44	44	54	51	51	64	62	39	42	53	50.7
Glenville	Maximum	90	94	95	95	84	85	80	80	78	88	87	72	70	69	70	80	74	72	75	75	74	66	65	70	75	79	86	78	63	80	78	78.3
	Minimum	59	58	55	58	61	67	46	45	57	61	57	48	40	55	62	61	51	41	39	39	45	44	50	56	50	58	63	57	40	45	60	52.5
Grafton	Maximum	83	93	90	90	83	80	75	79	72	87	77	62	67	63	70	76	64	65	67	69	72	63	61	69	77	79	81	76	60	79	76	74.4
	Minimum	58	59	56	57	62	66	46	42	57	63	60	45	35	55	60	60	50	37	36	37	45	42	49	57	55	59	61	49	51	46	56	52.0
Lost Creek	Maximum	87	89	91	86	80	77	74	75	72	85	77	66	66	63	69	70	62	65	70	66	69	60	63	67	75	74	81	76	60	78	77	73.1
	Minimum	57	55	55	59	56	67	42	43	56	69	61	46	33	55	62	53	50	36	34	36	42	40	50	54	49	63	62	55	36	46	60	51.0
Mannington	Maximum	79	86	85	83	78	75	72	71	72	82	77	60	63	61	69	71	64	62	65	66	68	61	60	71	73	75	77	75	58	77	73	71.3
	Minimum	59	59	54	57	62	68	43	41	54	62	60	45	34	53	61	62	46	36	36	36	45	41	48	51	48	57	62	55	35	46	57	50.7
Morgantown	Maximum	81	88	88	86	84	..	74	74	73	..	80	60	65	61	71	78	64	66	65	69	70	61	58	68	75	75	77	76	76	76	74	72.7
	Minimum	..	68	64	63	66	..	48	41	57	..	57	44	32	54	60	60	47	35	38	37	52	43	48	52	54	65	60	51	36	50	64	51.6
New Cumberland	Maximum	71	87	89	86	78	74	71	68	74	83	76	70	58	61	67	67	65	65	..	66	62	61	60	69	69	73	70	70	54	70	70	70.1
	Minimum	57	57	57	58	66	61	44	36	51	62	54	44	29	52	58	61	46	34	..	33	50	41	36	51	52	61	57	48	40	48	63	50.3
New Martinsville	Maximum	84	92	91	89	85	79	78	78	74	86	77	68	67	62	70	70	70	66	68	72	67	62	65	78	77	75	82	72	65	78	72	74.8
	Minimum	63	61	59	60	65	69	50	46	59	62	65	46	36	53	62	63	63	39	40	41	16	43	48	55	52	60	63	55	39	49	62	54.0
Parkersburg	Maximum	85	91	90	89	81	75	75	75	77	85	72	53	65	65	68	73	58	64	66	67	67	59	64	72	70	77	82	72	59	77	73	72.5
	Minimum	63	65	64	70	67	59	49	49	59	67	53	45	39	56	63	56	46	41	41	45	52	46	52	56	55	64	64	44	42	52	61	54.4
Parsons	Maximum	84	80	87	81	82	78	71	74	72	82	75	65	65	63	69	76	65	67	67	71	70	64	58	56	70	80	80	70	65	77	73	72.3
	Minimum	56	56	56	52	52	56	44	44	55	60	56	48	35	53	60	58	45	35	34	36	45	44	46	45	51	47	61	45	34	34	57	48.4
Philippi	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Pickens	Maximum	80	89	85	82	76	73	69	70	72	78	70	62	63	64	67	72	63	64	65	67	67	60	60	64	76	74	76	..	70	75	72	70.8
	Minimum	43	56	54	56	55	56	42	42	51	60	56	45	33	53	59	57	41	32	35	35	48	50	45	53	56	62	59	..	40	51	53	49.3
Terra Alta	Maximum	75	82	80	79	74	70	66	65	67	76	74	60	58	58	65	70	60	62	64	65	64	57	53	54	72	72	72	70	50	72	79	67.1
	Minimum	58	55	61	58	60	61	46	39	45	60	59	43	32	47	57	57	43	33	35	37	42	42	45	42	47	61	59	49	33	42	56	48 5
Wellsburg	Maximum	74	87	86	85	78	76	71	69	75	83	73	57	60	63	69	68	64	64	63	62	62	64	61	70	71	74	72	71	60	74	71	70.2
	Minimum	58	57	55	56	64	63	42	37	51	60	53	44	32	48	59	61	44	37	36	36	38	42	39	49	48	65	58	49	34	48	60	49.1
Weston	Maximum	84	90	91	89	85	80	75	78	74	85	81	71	68	66	70	78	66	66	68	70	69	63	70	71	74	75	81	74	61	80	78	75.2
	Minimum	59	57	59	60	64	66	45	46	58	68	62	47	38	56	63	63	50	38	38	38	44	52	55	54	52	64	65	56	40	47	48	53.3
Wheeling§	Maximum	79	95	95	95	81	80	80	79	76	89	68	59	67	63	68	68	64	69	68	69	65	51	62	80	72	76	73	63	63	77	70	73.0
	Minimum	58	60	60	60	62	67	45	40	42	59	65	46	39	39	55	61	47	41	40	41	43	41	40	48	50	51	60	63	39	42	51	50.2
Southern Division.																																	
Beckley	Maximum	80	88	80	79	76	78	70	65	70	78	77	57	74	75	74	76	65	70	70	70	67	69	60	67	79	81	80	79	76	70	79	73.5
	Minimum	48	49	55	67	60	64	48	48	41	43	48	55	47	48	59	56	50	41	35	40	48	46	39	55	54	67	64	55	50	54	55	51.3
Bluefield	Maximum	86	87	84	80	84	73	72	68	70	82	81	79	64	75	71	78	72	57	70	68	67	65	63	62	71	77	79	76	72	77	80	73.8
	Minimum	56	63	61	63	59	56	51	41	54	58	55	57	48	45	61	59	50	45	38	36	52	53	55	54	50	58	59	62	54	54	59	54.8
Charleston	Maximum	92	95	91	90	93	85	84	81	87	87	86	84	79	71	73	79	77	68	69	74	74	75	72	71	77	86	87	85	75	79	84	81.0
	Minimum	60	59	59	62	60	65	52	48	45	60	59	58	45	48	52	63	53	43	41	44	44	45	49	45	52	62	62	63	50	52	59	53.5
Elkhorn	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Green Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Hinton§	Maximum	91	92	89	81	80	82	76	66	66	88	89	65	60	79	72	82	58	64	71	75	69	65	58	60	69	85	87	78	78	82	84	75.6
	Minimum	44	52	56	62	62	62	51	48	48	56	56	60	50	48	51	62	58	47	40	40	45	50	54	55	55	55	56	55	54	54	55	53.0
Holcomb§	Maximum	84	87	84	80	80	74	69	71	71	81	81	64	71	73	72	77	67	65	67	68	71	61	62	64	72	76	80	71	74	79	79	73.4
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Huntington§	Maximum	89	92	89	78	84	77	75	71	80	86	73	50	60	67	66	74	52	55	50	57	56	56	62	61	72	80	85	81	61	75	79	70.7
	Minimum	62	60	60	62	67	67	52	50	50	63	63	50	43	43	60	65	52	44	41	43	43	46	46	55	55	55	66	62	48	50	56	54.2
Lewisburg	Maximum	83	87	83	79	78	75	70	67	65	81	81	74	57	70	70	78	66	58	64	69	68	65	60	58	66	78	81	76	68	76	79	71.9
	Minimum	48	53	55	61	57	63	48	38	50	51	53	55	45	46	58	57	51	44	31	33	45	52	52	52	52	51	61	56	51	47	53	50.6
Marlinton	Maximum	74	82	78	74	72	70	64	62	58	74	78	64	56	64	66	72	62	56	60	62	58	60	60	56	62	72	74	64	60	72	74	66.5
	Minimum	48	54	52	54	52	54	42	36	46	50	52	50	36	42	54	56	44	34	28	30	34	40	44	50	52	54	59	44	40	42	56	45.8
Point Pleasant	Maximum	91	94	94	90	82	80	80	75	78	89	81	60	66	66	79	75	66	68	69	71	73	64	66	65	75	77	84	72	61	71	76	75.1
	Minimum	62	59	60	66	66	67	46	47	60	64	59	47	38	56	63	61	50	38	38	47	48	42	51	59	55	66	65	53	42	47	63	54.5
Powellton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	81	80	....
	Minimum	54	58	59	64	61	60	41	45	59	60	60	51	56	53	62	61	55	44	40	42	59	52	56	59	54	51	64	61	54	51	59	54.5
Robertsburg§	Maximum	91	94	93	88	88	77	77	73	85	86	78	54	68	66	80	78	62	71	70	73	68	65	64	60	76	79	89	73	65	76	76	75.5
	Minimum	60	59	60	62	65	67	48	47	47	63	61	49	40	45	57	60	53	40	39	40	40	44	44	50	54	55	65	65	46	48	57	52.6
Ryan	Maximum	90	91	90	86	89	80	79	73	76	86	75	66	66	64	68	76	65	65	60	70	67	65	66	66	69	79	84	72	62	80	79	74.3
	Minimum	61	54	56	61	65	59	45	44	58	59	57	54	37	54	62	62	52	37	33	32	47	43	53	61	49	59	63	55	43	43	59	52.0
Spencer§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Sutton	Maximum	55	56	58	60	57	65	..	..	46	61	..	..	57	54	55	51	..	46	..	57	46	49	51	57	59	58	56	56	44	47	61	53.7
	Minimum	48	55	53	56	55	54	47	39	50	52	49	45	47	46	45	55	51	46	32	35	40	44	54	52	52	51	51	52	50	52	59	48.7
Union§	Maximum	89	90	89	85	81	83	76	81	84	81	82	75	78	79	76	80	76	60	71	75	71	70	65	65	70	75	82	80	79	80	79	77.6
	Minimum	48	55	53	56	55	54	47	39	50	52	49	45	47	46	45	55	51	46	32	35	40	44	54	52	52	51	51	52	50	52	59	48.7
White Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Williamson§	Maximum	85	87	85	82	81	79	72	65	79	84	84	62	67	72	67	78	60	65	65	69	73	65	68	70	76	82	82	75	76	80	77	74.7
	Minimum	58	60	60	66	66	66	66	53	50	55	62	60	53	55	58	54	54	54	48	48	45	48	53	63	58	59	63	62	56	58	60	57.1

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Based on 850 records.
Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.

NWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

NOVEMBER, 1919

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JANUARY 21, 1920

Departure of the Mean Temperature from the Normal, November, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

VOL. XXVII. PARKERSBURG, W. VA., NOVEMBER, 1919. No. 11

GENERAL SUMMARY.

November was considerably warmer and much wetter than usual, with about the normal amount of sunshine. The average precipitation, 4.51 inches, was exceeded in only one November of record, or in 1900, although the November averages in 1897 and 1913 were 4.45 and 4.49 inches, respectively. Killing frosts occurred over the State on the 3d and 6th, the latest of record for the first general destructive frosts. The conditions were generally unfavorable for outdoor work but favorable for winter grains and pastures. The month closed with stock in good condition. Considerable corn was damaged on bottom lands by heavy rains and flooding.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.14 and 30.15 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.66 inches on the 20th, and 29.40 inches on the 29th. Elkins, 30.70 inches on the 21st, and 29.48 inches on the 29th.

TEMPERATURE.

The monthly mean for the State, determined from 45 stations, was 44.4°. The departure from the normal for 41 stations having ten or more years of record was +1.5°. The month opened warm and the temperature was also considerably above the normal from the 8th to the 12th and the 25th to the 30th. The lowest readings occurred on the 5-6th, 13-14th, and 19-20th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 79 per cent; 8 p. m., 68 per cent. The November averages for the same hours for the past 31 years are 81 and 72 per cent, respectively. Elkins, 8 a. m., 88 per cent; 8 p. m., 73 per cent. The November averages for Elkins for the same hours for the past 19 years are 84 and 73 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, determined from 61 stations was 4.51 inches. The departure from the normal for 44 stations having ten or more years of record was +2.07 inches. Heavy rain was general on the 1st and over the western and northern counties on the 26-27th. Moderate showers were received on the 7th, 11-12th, 22d, 24th, and 29th. There were scattered snow flurries or light snow on the 19th, 22d, 23d, and 24th, the amounts being sufficient to measure at several stations on the 23d and 24th. The first snow of the season was observed at Terra Alta on the 4th.

RIVERS.

Marked rises occurred in the rivers from the 1st to the 4th and the 26th to the 28th, causing considerable damage to corn on river bottoms. A flood stage of 22.8 feet occurred at Glenville on the 2d and crest stages at Parkersburg and Point Pleasant were 31.7 and 36.3 feet, respectively.

WIND.

The average wind velocity at Parkersburg was 5.9 miles per hour, or 0.1 mile below the November average for 29 years. The average at Elkins was 5.7 miles per hour, or 1.4 miles above the November average for 20 years. The highest velocity at Parkersburg was 26 miles per hour from the southeast on the 29th, and at Elkins 34 miles per hour from the southwest on the 26th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 36 per cent of the possible amount, or normal as compared with the November average for 22 years. The average at Elkins was 38 per cent, or 1 per cent below the November average for 20 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 3d and 4th; Charleston, 17th; Elkins, 9th; Glenville, 12th and 13th; Mannington, 3d and 10th; Romney, 1st; Rowlesburg, 9th and 28th; Terra Alta, 1st, 22d, 25th, 26th, and 27th; Wheeling, 4th, 9th, 17th, 21st, 25th, and 28th; Williamson, 6th and 15th.

Hail: Pickens, 4th.

Halo, lunar: Elkins, 6th; Parkersburg, 3d; Wheeling, 6th, 7th, 8th.

Sleet: Mannington, 22d.

Smoke, light: Lost Creek, 8th, 9th, and 10th.

Thunderstorms: Bens Run, Mannington, Smithfield, Wellsburg, and Wheeling, 25th; Burlington, 4th; Moundsville, 24th; New Cumberland, 25th and 29th.

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	42.5	80	8	3.04	....	....	...	..	..	..
1892	41.7	81	3	3.10	....	....	....	..	..	..
1893	41.4	74	3	2.12	3.22	0.47	....	13	6	11
1894	39.8	82	5	2.11	3.47	0.25	....	12	6	12
1895	44.6	87	12	2.35	4.00	0.20	....	12	8	10
1896	48.1	80	10	3.50	5.07	1.56	....	10	8	12
1897	45.0	76	13	4.45	7.15	0.30	....	9	9	12
1898	41.4	75	− 3	2.84	4.74	1.00	....	9	11	10
1899	45.6	76	14	1.93	3.49	0.20	T.	11	9	10
1900	45.5	86	9	5.20	8.88	2.71	2.8	8	8	14
1901	38.0	79	7	2.51	5.35	1.23	1.3	8	6	16
1902	50.3	83	12	3.27	4.56	1.23	0.7	11	6	13
1903	38.0	80	− 4	2.46	4.98	0.67	4.6	11	8	11
1904	41.2	75	9	0.64	3.05	0.07	1.4	12	7	11
1905	41.8	74	10	2.44	5.67	0.67	T.	13	7	10
1906	44.2	84	13	2.39	5.50	0.35	2.2	15	5	10
1907	41.8	74	13	3.40	7.05	1.41	1.0	10	8	12
1908	43.3	81	9	1.14	2.73	0.48	5.2	15	8	7
1909	49.1	84	12	1.34	3.85	0.23	0.2	14	7	9
1910	37.3	75	5	1.95	4.41	0.66	1.8	8	7	15
1911	40.5	83	7	2.74	5.54	1.27	2.0	10	7	13
1912	42.8	78	2	1.69	4.08	0.40	0.9	14	7	9
1913	44.5	82	− 1	4.49	7.50	0.61	15.4	12	5	13
1914	42.6	84	2	1.32	2.27	0.50	2.9	16	6	8
1915	45.2	85	11	3.06	5.99	1.15	1.1	13	8	9
1916	43.8	81	8	1.77	4.07	0.75	0.3	16	5	9
1917	39.6	78	0	0.89	3.65	0.05	1.5	16	4	10
1918	42.9	79	12	1.89	4.60	0.64	0.2	13	5	12
1919	44.4	80	10	4.51	7.53	0.85	0.3	12	6	12
Means and extremes	43.0	87	− 4	2.57	8.88	0.05	2.2	12	7	11

Climatological Data for November, 1919.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	3	43.8	.....	79	1	15	14	39	1.18	.....	.....	0	5	19	2	9	w.	Elmer Keister.
Burlington	Mineral	875	25	42.8	+ 0.5	69	12	19	25	39	1.90	+0.16	1.60	T.	4	7	16	7	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	30	.....	.....	.....	.....	.....	.....	.....	2.26	+0.02	0.90	0	6	.....	.....	.....	e.	S. W. Lightner.
Martinsburg	Berkeley	435	27	43.2	+ 0.3	66	1	25	16†	36	3.67	+1.54	1.79	0	8	17	3	10	nw.	G. W. Van Metre, C. E.
Moorefield[a]	Hardy	900	23	45.8	+ 2.3	74	1	19	14†	45	1.44	−0.18	1.03	0	6	22	4	3	.....	M. S. Henkel.
Piedmont	Mineral	919	6	43.2	.....	68	12	22	25	37	1.98	.....	0.86	T.	11	10	12	8	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	21	44.6	+ 2.0	74	12	19	14†	44	3.13	+1.17	1.85	0	5	12	6	12	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	20	44.0[b]	+ 0.4	78[c]	1	16[b]	19†	46	0.85	−0.79	0.40	0	3	8	9	13	w.	J. M. Mallow.
Wardensville	Hardy	1,200	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Luther F. Sutton.
Averages and	extremes	.....	.....	43.9	+ 1.1	79	1	15	14	46	2.05	+0.32	1.85	T.	6	14	7	9	nw.	
Northern Division.																				
Bens Run	Pleasants	622	17	46.2	+ 3.0	69	9†	22	14†	34	5.98	+3.41	2.20	1.0	8	15	6	9	.....	J. D. Riggs.
Brandonville	Preston	1,809	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	22	43.7	+ 2.2	66	1†	19	14†	36	4.95	+1.58	2.15	T.	10	13	2	15	.....	H. A. Darnall.
Cortland	Tucker	3,300	3	.....	.....	.....	.....	.....	.....	.....	2.50	.....	0.85	0	5	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	17	46.4	+ 2.7	69	9	17	14	40	5.81	+3.36	1.90	0	11	12	1	17	w.	J. M. Reed.
Davis	Tucker	3,093	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Branson Harper.
Elizabeth	Wirt	646	7	.....	.....	.....	.....	.....	.....	.....	5.92	.....	1.76	0	11	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	18	41.4	+ 1.8	65	9	17	14	41	3.25	+0.39	0.79	3.0	15	8	5	17	w.	U. S. Weather Bureau.
Fairmont	Marion	883	13	43.1	+ 0.3	72	9	19	14	39	5.51	+2.81	1.94	T.	14	15	1	14	w.	F. P. Hall.
Glenville	Gilmer	738	25	46.4	+ 0.9	75	1	11	14	48	4.75	+1.76	1.20	0.5	10	12	6	12	w.	Howard R. Brannon.
Gratton	Taylor	1,000	26	43.9	+ 1.1	67	29†	17	14†	37	5.04	+1.95	2.07	T.	10	12	5	13	e.	W. C. Byers.
Lost Creek	Harrison	1,026	21	44.1	+ 1.9	68	11	15	14	43	4.20	+1.86	1.54	T.	13	12	3	15	w.	Allen Smith.
Mannington	Marion	974	16	44.2	+ 3.1	67	9†	17	14	38	5.91	+3.48	1.68	1.5	14	10	6	14	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	26	45.0	+ 1.6	69	30	19	14†	39	5.65	+2.76	1.50	T.	8	8	3	19	.....	Prof. E. L. Andrews.
Moundsville	Marshall	642	16	42.0[a]	− 1.3	68[a]	8†	20	13	37[a]	4.77	+3.07	1.40	0	9	14	6	10	sw.	M. Z. White.
New Cumberland	Hancock	987	21	42.2	+ 0.9	65	1†	16	14	34	3.91	+2.10	1.50	1.9	11	12	11	7	ne.	M. F. Smith.
New Martinsville	Wetzel	634	25	45.4	+ 0.8	70	9	20	14†	36	6.55	+3.94	2.20	T.	10	14	5	11	s.	Wm. Ankrom.
Parkersburg	Wood	638	32	44.8	+ 1.7	65	9	22	14	31	4.76	+1.93	2.21	0.4	11	6	8	16	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	19	44.0	+ 2.8	68	10	15	20	45	4.12	+1.60	.....	0	9	13	6	11	.....	J. W. Swisher.
Philippi	Barbour	1,149	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Attic G. Robinson.
Pickens[a]	Randolph	2,697	16	41.2	+ 0.6	65	9	14	20	42	6.54	+2.73	2.03	7.0	11	12	3	14	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	32	.....	.....	.....	.....	.....	.....	.....	5.03	+2.01	1.30	T.	14	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	10	.....	.....	.....	.....	.....	.....	.....	7.01	+4.95	2.60	0	19	.....	.....	.....	w.	Wm. Hughes.
Smithfield	Wetzel	835	13	42.3	+ 1.2	65	9	17	14†	40	7.53	+4.74	2.64	0.5	12	13	7	10	se.	G. M. Whisler.
Terra Alta	Preston	2,612	18	40.6	− 1.5	64	10	14	14	35	3.51	−0.05	1.61	.....	15	9	4	17	w.	W. J. Grimm.
Wellsburg	Brooke	1,225	18	41.8	+ 0.6	65	10†	16	14	35	4.06	+1.95	1.72	T.	10	13	7	10	.....	George P. Pfister.
Weston	Lewis	1,026	23	42.6	− 0.7	69	9	19	13†	37	4.42	+1.12	1.65	T.	15	12	3	15	.....	Weston State Hospital
Wheeling	Ohio	645	32	43.2	+ 0.8	70	9	20	14	42	5.10	+2.65	1.51	T.	11	16	4	10	w.	Miss M. B. Forsyth.
Averages and	extremes	.....	.....	43.5	+ 1.2	75	1	11	14	48	5.07	+2.44	2.64	0.6	11	12	5	13	w.	
Southern Division.																				
Bancroft	Putnam	574	15	46.2	+ 1.2	73	1	19	20	43	5.03	+2.51	1.23	0	9	20	0	10	sw.	R. E. Dent.
Beckley	Raleigh	2,440	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John A. Ewart.
Bluefield	Mercer	2,558	24	47.1	+ 2.6	72	1	19	14†	44	2.99	−0.45	0.65	0	7	7	12	11	.....	Norfolk & Western Ry.
Breading	Mingo	507	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	4	.....	.....	.....	.....	.....	.....	.....	5.72	.....	2.60	2.8	6	.....	.....	.....	.....	Miss Katie Jarvis.
Charleston	Kanawha	597	16	48.7	+ 0.6	80	1	21	20†	43	5.45	+2.54	1.40	0	10	10	0	20	sw.	C. V. Lewis.
Clay	Clay	706	3	.....	.....	.....	.....	.....	.....	.....	4.22	.....	1.30	0	10	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	17	48.2	+ 4.6	76	12	16	20	48	4.63	+2.43	1.90	T.	12	10	9	11	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	3	.....	.....	.....	.....	.....	.....	.....	7.44	.....	2.75	T.	12	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	3	.....	.....	.....	.....	.....	.....	.....	5.75	.....	1.77	0	12	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	4	.....	.....	.....	.....	.....	.....	.....	4.84	.....	1.18	0	10	.....	.....	.....	.....	Lockmaster.
Dam 26 O. R.	Mason	505	3	.....	.....	.....	.....	.....	.....	.....	4.63	.....	1.05	0	9	.....	.....	.....	.....	U. S. Engineer Office.
Elkhorn	McDowell	1,933	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Lincoln.
Evans	Jackson	606	7	46.4	.....	65	18	22	14†	32	5.72	.....	2.07	0	12	11	5	14	.....	B. F. Sayre.
Gary	McDowell	1,426	3	.....	.....	.....	.....	.....	.....	.....	3.20	.....	1.00	0	14	.....	.....	.....	.....	U. S. Coal & Coke Co.
Gassaway	Braxton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Green Sulphur Spgs.	Summers	1,600	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. A. Hays.
Hinton	..do.....	1,450	22	46.6	+ 2.2	72	6	21	14†	44	3.41	+1.29	1.88	0	13	13	2	15	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	7	43.7	.....	70	1	15	20	37	3.40	.....	1.50	1.5	12	11	4	16	.....	W. C. Williams.
Huntington	Cabell	538	25	45.7[m]	+ 2.0	72[m]	29	21	16†	40[m]	6.70	+4.00	2.64	0	10	10	3	17	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	0	.....	.....	.....	.....	.....	.....	.....	4.09	.....	1.40	0	7	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	3	.....	.....	.....	.....	.....	.....	.....	6.13	.....	2.18	0	14	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	19	44.1	+ 2.7	71	1	17	14	37	3.74	+1.47	2.12	T.	8	14	5	11	s.	Geo. T. Argabate.
Logan	Logan	687	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent C. & O. Ry.
Madison	Boone	704	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	20	37.4	− 0.9	68	3	10	14†	42	4.99	+2.25	2.55	0.5	10	10	8	12	n.	S. L. Brown.
Point Pleasant	Mason	553	26	46.2	+ 1.0	69	1	19	20	37	5.48	+2.68	2.15	0	11	9	8	13	.....	W. D. Holmes.
Powellton	Fayette	933	23	46.4[c]	+ 1.7	74[c]	1	22[c]	14†	35[d]	5.98	+3.35	.....	T.	13	16[c]	6[b]	6[b]	.....	Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	3	.....	.....	.....	.....	.....	.....	.....	4.44	.....	1.90	0	10	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	3	.....	.....	.....	.....	.....	.....	.....	1.87	.....	0.33	0	8	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	19	44.8	+ 1.4	70	29	18	20	42	5.54	+3.19	1.54	0	9	9[c]	5[c]	13[c]	.....	E. C. Brace, Jr.
Ryan	Roane	700	16	45.1	+ 1.7	71	1	15	14†	41	4.96	+2.47	1.90	0	14	11	6	13	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	15	45.2	+ 1.9	66	9	19	20	41	5.49	+3.08	1.57	T.	9	10	6	14	.....	A. M. McKown.
Sutton	Braxton	839	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lawrence Freeman.
Union	Monroe	2,250	15	47.1	+ 6.8	78	1	16	14	40	2.10	+0.08	1.10	0	5	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Ayres.
Williamson	Mingo	660	19	47.6	+ 2.3	70	9†	25	14	35	4.98	+2.31	1.56	0	11	12	6	12	w.	J. F. Keyser.
Averages and	extremes	.....	.....	45.7	+ 2.1	80	1	10	14†	48	4.71	+2.21	2.75	0.1	10	12	5	13	sw.	
State averages and	extremes	.....	.....	44.4	+ 1.5	80	1	10	14†	48	4.51	+2.07	2.75	0.3	10	12	6	12	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[z] Approximated by the observer.

Daily Precipitation for November, 1919.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Panhandle Division.																																	
Bayard	Potomac							T.					T										.22			*	.26			T.			
Brandywine	....do	*	.70																														1.18
Burlington	....do	1.60			T.			T.				T.	T.							T.						.10		.05		.15			1.90
Harpers Ferry	....do		.90			.15		T.				T.	.51										.10	.15			.45						2.26
Martinsburg	....do	1.70			.18							*	.55										.14			*	.85			.25			3.67
Moorefield	....do	1.03						.04				.02											.03			.12	.20						1.44
Piedmont	....do	.86	.03		.05			.06				.14	.05	T.						T.				.04	.07	.21	.28			.16			1.98
Romney	....do	1.85						T.				.22		.33													.35			.38			3.13
Upper Tract	....do	.40	.20				T.																			T.	.25						0.85
Wardensville	....do																																
Northern Division.																																	
Bens Run	Ohio	.41						.45				.36												.20	.66	2.00	2.20			.39			5.98
Brandonville	Monongahela																																
Buckhannon	....do	2.15	.25		T.			T.	T			.15	.20	T.						T.			.26	T.	.40	.44	.90	.10		.10			4.95
Central Station	Middle Is. Creek																																
Cortland	Monongahela		.85									.33													.80	.30		.22					2.50
Creston	Little Kanawha	.93	1.01					.02				.15	.18	T.							T.		.32	T.	.45		1.90	.60		.10	.15		5.81
Davis	Monongahela																																
Elizabeth	Little Kanawha	1.33	.72					.06				.30	.03										.18		.43	1.76	.70			.14	.27		5.92
Elkins***	Monongahela	1.31	.04		.02			.02	T.		.05	.08	.08	T.							.02		.17	.28	.04	.54	.45	T.		.14	.01		3.25
Fairmont	....do	1.26	.68			.02		.02	T.			.16	.03	.15						T.	T.		.04	.01	.27		1.94	.70		.13	.10		5.51
Glenville	Little Kanawha	.90	1.05					.04				.13	.04										.40		.38		1.20	.46		.15			4.75
Grafton	Monongahela	*	1.63		T.			.23				.13	.37							T.			T.	*	.41	*	2.07			.20			5.04
Lost Creek	....do.	1.18	.21		.03			.03				.05	.19							T.			.10	T.	.26	.25	1.54	.22		.10	.01		4.20
Mannington	....do	1.42	.31		.03			.03				.19	.11	T.						T.			.07	.07	.26	1.25	1.68	.12		.29	.08		5.91
Morgantown	....do	1.35	.25										.30							T.					.25	1.50	1.45	.35		.14			5.65
Moundsville	Ohio		.90				.10				.16												.10		.75	1.04	1.40		.10	.22			4.77
New Cumberland	....do	.79	.11		T.						T.	.25	.05							.05			.16	T.	.05	.65	1.50	.01		.29	T.		3.91
New Martinsville	....do	.60	.50					.05				.30								T.			.20	.25	.20	1.75	2.20			.50	T		6.55
Parkersburg* **	Ohio	.47	.05					.10			.09	.28	.01							T			.10	.44		1.64	1.46		T.	.12	T.		4.76
Parsons	Monongahela	*				1.95		*				*	.39										.08			*	1.58			.12			4.12
Philippi	....do																																
Pickens	....do	1.63	.60		T.			.06				.21	.23							.10			T.	.20	.50	.85	2.03			.13			6.54
Rowlesburg	....do	1.00	.86			.08			.08			.18	.10	.22						T.	T.		.08	.05	.38		1.30	.43		.22	.05		5.03
Saint Marys	Ohio	1.40	.68	T.				.10	T.			.20	.05												.50		2.60	1.10		.12	.26		7.01
Smithfield	Fishing Creek	2.12	.60			T		.05				.29	.08	.03							T.		.11		.25		2.64	.90		.21	.25		7.53
Terra Alta	Monongahela	1.61	.17		.03			.11		.01		.24	.26	.04						*			.04	*		.56		.17	.01	.26			3.51
Wellsburg	Ohio	.52	.53	T.				T.				.20								T.				.16	.04	.55	1.72	.03		.23	.08		4.06
Weston	Monongahela	1.65			.04		.04	.03			.12	.07	.17									.23	.05	.27		1.18	.36	.01	.07	.13			4.42
Wheeling	Ohio	.75	1.01			.01		.04	T.			.14	T.	T.						T.			.04	T.	.15		1.21	1.51	T.	.05	.19		5.10
Southern Division.																																	
Bancroft	Great Kanawha	1.23	1.20									.30	.05										.28		.35		1.15	.42		.05			5.03
Beckley	....do																																
Bluefield	....do	.65	.20					.05			T	.40											.15			T.	T.	.45		.10			2.00
Breading	....do																																
Camden-on-Gauley	....do	2.60																					.24		.28	1.00	.80			.80			5.72
Charleston	....do	1.00	1.40					T.	.10			.20	.50	T.									.30	T.	.60		.90	.30		.15			5.45
Clay	....do	.57	1.30					.05				.05	.07	.12									.40		.46		.85	.35					4.22
Cuba	Sand Creek	1.00	.10					.05			.05	.35	T.							T.			.10	.30	.20	.25	1.90	.03		.30			4.63
Dam 19 O. R.	Ohio	1.05	.62					.16				.40	.02								T.		.11	T.	.55	.08	2.75	1.47		.12	.13		7.14
Dam 20 O. R.	....do	1.08	.59					.12				.51	.02										.12	.02	.52	T.	1.77	.78		.10	.12		5.75
Dam 22 O. R.	....do	.98	.75					.04				.32											.15	T.		.42	1.18	.80	T.	.05	.18		4.84
Dam 26 O. R.	....do	.72	1.03					T.	T.			.48	.15										.15	T	.35		.90	.80		.05			4.63
Elkhorn	Big Sandy																																
Evans	Ohio	1.87	.14					.08			.05	.37											.25		.46	.20	2.07	.05		.08	.10		5.72
Gary	Big Sandy	1.00	.65	.03	.02			.01	.09			.19	.15	.04									.12		.28		.28	.22		.12			3.20
Gassaway	Great Kanawha																																
Green Sulpr. Spgs.	....do																																
Hinton	....do	.24	1.88						.04			.20	.04										.10	.08	.16		.26	.16	.02	.14	.12		3.44
Holcomb	....do	1.50	.40					.02				.15	.07										*		.15	.35	.48		.21	.01	.03		3.40
Huntington	Ohio	1.30	1.34					.24	T.			.56	T.										.22		.16	T.	1.90	.74		.06	.18		6.70
Kanawha Falls	Great Kanawha	1.30	1.40					T.	T.			.15	.15												.10		.47	.22					4.09
Kayford	....do	1.45	2.18	T.				.01	.11			.19	.12	.17									.26	.15	.37		.60	.36	T.	.06	.10		6.13
Lewisburg	....do	2.12	.24					T.	T.			.18	T.										.46		.21		.18	.22	T.	.13			3.74
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	....do	1.90	.65					T.				.25	.17							T.			.32		.28	.10	.62		.06	.34			4.99
Point Pleasant	Ohio	1.52	.18								.13	.48											.16	.01	.40	.15	2.15	.08		.19			5.48
Powellton	Great Kanawha	*	*	2.88				.95			T.	.25	.17	T.						T.			.36		.40	.30	.47	.04	.02	.04	.10		5.98
Raleigh	....do	.84	1.90						.06			.26	.12										.25		.37		.58	.19		.07			4.44
Renick	....do					.20						*	.32											.30	.28		.33	.27		.17			1.87
Robertsburg	....do	.93	1.39									.40												.30		.36		1.54	.57		.03	.02		5.54
Ryan	....do.	1.90	.12					.04		.04	.03	.20	.32											.13	.39	.18	.30	1.14	.03		.07			4.96
Sissonville	....do																																
Spencer	Little Kanawha	.69	1.39					T	T.			.23	.11	.07																				
Sutton	Great Kanawha																				T.		.35	.47			1.57	.61	T.	T.			5.49
Union	....do		1.10																														
White Sulphur Spgs.	....do																						.25		.25		.40			.10			2.10
Williamson	Big Sandy	1.24	1.56			T.			T.			.26	.28	.05									.25	T.	.02		.62	.25		.05	.40		4.98

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‡‡ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement

T. Trace, or less than 0.01 inch.

‡‡‡ Probably incomplete.

Daily Temperatures for November, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Brandywine	Maximum	79	65	56	60	58	57	52	55	60	60	62	60	60	54	53	59	62	62	52	48	53	51	52	48	54	62	64	50	52	53	..	57.1
	Minimum	48	46	27	37	35	20	28	30	29	27	36	53	35	15	21	26	24	27	28	16	16	27	38	27	19	35	34	40	39	38	..	30.5
Burlington	Maximum	65	60	51	52	50	53	40	50	52	61	62	69	58	48	50	56	63	60	49	45	58	52	52	44	38	54	51	45	57	58	..	53.4
	Minimum	59	35	29	33	35	33	33	37	29	28	47	49	31	20	28	26	24	28	30	25	20	28	40	28	19	34	39	38	38	33	..	32.3
Martinsburg§	Maximum	66	54	51	58	47	58	42	51	53	55	56	63	43	48	47	58	56	62	37	46	55	52	53	52	50	62	53	41	56	51	..	52.5
	Minimum	54	46	32	33	38	37	32	35	30	30	33	48	41	26	27	25	28	29	33	32	25	26	37	33	26	26	43	37	37	39	..	33.9
Moorfield	Maximum	74	60	56	59	58	56	52	55	58	62	68	69	65	56	55	63	68	66	55	50	63	53	55	51	60	60	65	51	53	..	..	59.2
	Minimum	57	48	30	36	36	36	29	38	32	31	50	52	36	19	25	19	23	28	25	22	19	27	30	30	19	26	40	41	38	..	..	32.3
Piedmont	Maximum	66	60	49	52	48	56	46	51	50	61	62	68	53	47	51	56	64	58	44	43	57	51	49	42	38	53	56	46	51	58	..	52.7
	Minimum	58	42	30	34	34	37	30	37	31	32	47	51	32	24	27	23	27	30	29	26	25	32	37	34	22	38	41	36	36	32	..	33.8
Romney	Maximum	72	55	54	52	57	56	54	55	56	63	70	74	44	53	53	63	68	63	58	48	63	60	61	58	55	41	51	56	51	53	..	57.2
	Minimum	48	46	27	35	34	36	28	36	36	29	40	38	34	19	29	20	24	39	30	27	20	21	29	34	29	19	37	40	38	40	..	32.1
Upper Tract	Maximum	78	70	65	64	63	63	63	60	60	62	63	63	63	63	63	63	62	62	62	62	..	..	60	60	64	65	65	64	62	60	..	63.4
	Minimum	42	40	28	28	26	26	27	30	30	30	29	28	25	20	20	20	19	18	16	16	..	..	19	20	21	25	25	23	20	19	..	24.6
Wardensville	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Northern Division.																																	
Bens Run	Maximum	65	63	62	59	49	56	49	56	69	66	64	62	52	44	50	59	63	69	50	46	57	61	47	48	47	54	43	45	64	62	..	56.0
	Minimum	60	43	35	46	35	30	40	41	36	42	49	45	28	22	25	25	31	47	32	22	25	39	38	34	28	43	38	40	43	33	..	36.5
Buckhannon	Maximum	66	59	61	61	48	51	50	55	63	64	59	57	53	41	45	55	58	54	40	40	56	46	46	40	58	60	49	48	66	65	..	53.8
	Minimum	59	44	34	41	35	25	35	42	33	35	50	44	30	19	22	23	28	31	28	19	20	20	35	32	25	48	39	37	45	30	..	33.6
Creston	Maximum	67	61	65	62	55	55	52	55	69	65	63	60	58	47	52	60	64	58	53	48	62	57	50	49	60	58	45	48	63	63	..	57.5
	Minimum	60	45	32	42	35	26	32	44	40	55	52	44	35	17	21	26	30	31	18	20	34	35	33	25	45	40	40	44	33	35	..	35.2
Elkins	Maximum	61	48	59	59	37	55	45	53	65	60	57	64	49	43	47	55	60	53	36	40	58	45	43	37	54	64	43	49	63	53	..	51.8
	Minimum	48	31	29	37	31	29	32	37	30	42	49	49	24	17	24	20	23	31	25	19	17	27	32	22	18	41	38	38	43	26	..	31.0
Fairmont§	Maximum	61	56	64	62	40	54	46	60	72	70	65	56	39	44	50	59	62	59	35	46	59	49	45	41	56	50	42	51	67	39	..	53.3
	Minimum	60	42	34	40	34	34	37	39	33	36	39	44	32	19	21	25	27	31	29	20	21	24	37	30	24	28	39	36	37	36	..	32.9
Glenville	Maximum	75	61	68	64	59	60	53	56	74	67	63	60	58	47	55	64	66	61	53	51	65	54	50	51	63	67	48	49	67	66	..	59.8
	Minimum	60	41	33	41	34	26	33	43	37	35	53	44	28	11	18	19	24	25	30	16	17	29	38	30	23	47	39	40	43	33	..	33.0
Grafton	Maximum	66	61	64	61	54	53	58	58	66	66	60	57	65	43	46	56	61	55	48	41	41	49	45	40	61	60	46	52	67	67	..	55.2
	Minimum	58	41	30	41	32	36	34	32	30	35	52	41	28	17	20	19	24	28	28	17	18	30	34	30	23	44	37	37	50	31	..	32.6
Lost Creek	Maximum	67	60	64	63	50	52	50	51	60	62	68	56	55	44	50	60	64	60	50	46	61	50	45	44	90	64	50	46	66	66	..	56.1
	Minimum	59	45	30	40	34	22	33	41	30	36	48	41	32	15	19	20	24	32	28	16	18	29	32	26	21	44	39	37	42	31	..	32.1
Mannington	Maximum	66	62	62	60	53	52	46	59	67	67	63	57	55	44	48	58	61	57	50	44	57	47	45	42	55	56	45	45	65	67	..	55.2
	Minimum	60	42	30	42	34	36	33	38	30	35	53	42	30	17	19	20	25	29	29	18	20	31	37	32	23	44	38	36	43	32	..	33.3
Morgantown	Maximum	67	64	62	62	54	48	44	60	67	68	62	59	56	42	46	57	62	56	49	43	58	50	52	40	57	57	43	46	65	69	..	55.5
	Minimum	59	41	34	47	32	35	36	34	38	45	34	38	26	19	24	25	32	42	27	19	23	40	35	29	32	43	35	38	44	30	..	34.5
New Cumberland	Maximum	65	51	65	58	45	50	44	52	56	62	64	64	54	44	43	57	62	56	44	42	54	52	43	46	48	48	40	43	62	64	..	52.6
	Minimum	47	38	30	36	32	36	33	30	29	40	45	38	24	16	20	20	31	33	26	21	25	38	32	31	30	38	33	33	41	28	..	31 8
New Martinsville	Maximum	67	61	63	60	51	57	50	58	70	68	65	62	57	45	48	58	62	58	49	46	58	52	45	46	50	54	45	45	66	61	..	55.9
	Minimum	60	42	34	43	35	32	38	36	35	40	50	44	30	20	23	22	30	36	30	20	23	38	36	33	27	42	38	37	42	33	..	35.0
Parkersburg	Maximum	65	54	60	60	48	53	50	57	65	62	60	62	38	44	47	57	62	56	37	45	58	53	46	48	59	50	44	49	64	54	..	53.6
	Minimum	48	41	37	36	36	31	42	42	42	50	49	38	25	22	28	26	33	37	30	23	27	42	34	34	34	40	38	38	49	39	..	36.1
Parsons	Maximum	64	57	58	65	59	60	54	55	67	68	67	67	55	46	51	59	60	62	57	60	62	45	40	38	51	65	48	52	65	64	..	57.4
	Minimum	56	37	32	29	32	33	29	40	29	27	44	46	24	24	19	18	21	21	25	15	20	22	33	29	18	45	39	39	42	30	..	30.6
Philippi	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Pickens	Maximum	62	59	57	57	47	57	53	58	65	59	58	60	52	40	47	50	57	..	36	42	46	45	42	38	54	61	48	48	59	58	..	52.2
	Minimum	53	31	29	40	28	22	33	40	23	40	50	50	22	22	19	24	28	..	20	14	21	22	31	22	22	45	38	33	32	25	..	30.3
Terra Alta	Maximum	62	55	50	53	48	51	43	46	59	64	54	57	50	37	42	52	56	50	44	35	53	46	40	31	48	60	58	39	60	60	..	50.1
	Minimum	55	35	29	35	26	29	33	32	32	35	49	45	22	14	22	21	32	39	20	16	22	35	31	26	21	48	33	34	34	25	..	31.0
Wellsburg	Maximum	62	52	57	57	47	42	45	58	62	65	61	64	55	42	42	54	59	53	47	42	54	50	44	44	49	47	42	45	64	65	..	52.2
	Minimum	51	39	29	37	34	37	32	27	28	33	43	37	26	16	19	19	26	34	26	20	20	35	35	33	24	40	36	34	41	30	..	31.4
Weston	Maximum	65	55	65	60	44	52	47	55	69	66	58	55	37	44	50	60	62	58	33	44	60	49	46	44	62	66	43	56	67	40	..	53.7
	Minimum	41	33	39	34	26	29	40	34	35	39	45	30	19	20	23	26	30	29	19	21	23	38	30	26	35	39	38	38	38	22	..	31.4
Wheeling§	Maximum	63	57	62	57	42	54	46	58	70	67	67	66	42	46	49	61	64	59	67	49	54	49	44	49	49	45	40	50	65	36	..	54.2
	Minimum	59	41	32	35	35	34	37	33	32	33	40	40	27	20	23	22	22	31	30	22	23	23	36	34	27	30	37	35	35	35	..	32.1
Southern Division.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Bluefield	Maximum	72	61	62	61	55	64	56	54	61	56	56	66	58	47	52	59	63	59	51	50	62	53	53	49	61	66	62	55	58	59	..	58.1
	Minimum	58	40	38	46	30	28	44	44	42	40	49	54	30	19	26	21	19	36	24	19	24	39	31	31	33	55	42	45	44	32	..	36.1
Charleston	Maximum	80	79	75	70	66	65	63	55	67	65	67	61	55	50	59	60	65	59	59	58	64	63	62	60	65	69	54	60	59	59	..	63.1
	Minimum	42	39	35	35	35	32	37	43	43	50	52	50	30	22	22	24	25	30	30	21	21	24	30	32	32	34	38	40	42	38	..	34.3
Elkhorn	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Green Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Hinton§	Maximum	64	59	64	66	54	72	54	52	63	61	69	70	43	57	54	65	66	65	41	53	63	59	59	57	51	65	49	54	55	51	..	58.5
	Minimum	60	48	37	38	35	28	29	42	44	39	42	53	36	21	22	24	25	25	29	21	21	22	34	32	27	30	45	44	43	44	..	34.7
Holcomb	Maximum	70	60	61	55	48	60	54	55	63	57	67	63	55	43	46	55	59	54	46	42	56	45	47	39	57	63	62	49	59	61	..	55.0
	Minimum	58	41	32	30	30	23	34	39	42	42	42	52	27	16	18	25	25	25	24	15	19	26	28	27	24	48	40	40	47	32	..	32.4
Huntington§	Maximum	65	..	..	..	..	..	..	..	..	..	..	..	..	..	52	60	64	60	38	46	62	58	52	52	62	52	46	56	72	51	..	55.8
	Minimum	62	46	37	38	35	31	32	45	44	42	50	50	27	22	23	21	30	32	30	21	22	30	40	32	30	40	40	40	42	34	..	35.6
Lewisburg	Maximum	71	62	58	62	56	61	55	49	56	55	56	65	61	48	50	56	58	57	50	46	55	50	50	47	46	61	61	48	53	57	..	55.3
	Minimum	59	44	33	36	30	24	36	42	41	32	46	53	30	17	26	20	21	24	23	20	19	24	35	28	23	43	42	42	39	36	..	32.9
Marlinton	Maximum	62	58	68	50	42	56	46	46	54	50	56	56	52	44	46	50	52	50	38	44	50	42	40	38	36	56	52	42	50	50	..	49.2
	Minimum	54	44	26	26	22	16	26	36	34	26	40	48	22	10	14	12	14	18	22	14	10	18	20	18	14	32	35	38	32	28	..	25.7
Point Pleasant	Maximum	69	61	64	62	53	56	51	53	67	62	65	64	55	46	48	60	65	61	52	47	60	54	50	50	60	59	53	52	68	62	..	57.6
	Minimum	60	43	34	44	34	29	42	43	39	47	51	46	25	20	22	24	29	35	29	19	23	43	35	33	27	44	40	41	45	32	..	35.9
Powellton	Maximum	74	..	..	..	58	58	52	58	67	62	59	60	59	46	50	54	61	58	54	42	56	53	51	46	57	69	55	54	64	64	..	57.1
	Minimum	..	..	..	37	35	29	40	49	43	48	53	42	30	22	24	25	26	30	30	22	24	32	37	31	32	54	43	44	49	36	..	35.8
Robertsburg§	Maximum	63	56	66	60	55	61	55	52	69	62	65	61	38	46	56	60	64	59	35	50	62	54	50	51	62	50	47	55	70	37	..	55.7
	Minimum	62	45	34	37	35	29	34	44	39	40	45	45	26	20	22	23	23	32	30	18	20	30	34	33	27	37	39	39	42	36	..	34.0
Ryan	Maximum	71	59	65	63	50	55	50	56	67	62	50	59	50	44	59	60	63	61	49	45	60	60	55	48	62	63	45	47	65	65	..	57.0
	Minimum	59	45	29	40	33	22	37	44	39	44	51	44	25	15	18	19	23	26	25	15	26	28	30	30	23	45	39	41	45	35	..	33.2
Spencer	Maximum	62	60	65	61	46	55	50	55	66	62	60	60	38	46	59	59	62	57	33	45	60	52	48	62	62	62	45	52	50	62	..	54.9
	Minimum	62	42	34	36	35	26	42	43	41	48	49	46	30	20	20	22	28	30	29	19	21	45	32	42	42	42	39	39	40	21	..	35.5
Sutton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Union	Maximum	78	75	75	63	60	64	61	52	54	56	69	68	66	49	50	60	60	60	56	58	57	57	58	60	55	65	67	65	61	62	..	61.1
	Minimum	49	40	35	39	31	24	36	42	41	40	49	54	31	16	20	21	22	25	24	18	18	24	25	30	25	44	45	43	41	42	..	33.1
White Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Williamson§	Maximum	68	55	62	61	50	60	65	68	70	64	59	56	42	47	50	60	60	59	40	44	49	56	51	50	62	70	48	56	70	43	..	56.6
	Minimum	65	48	41	42	35	34	35	47	48	52	53	53	34	25	26	29	30	32	32	26	26	28	35	33	32	35	45	45	46	43	..	38.5

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, November, 1919.



U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

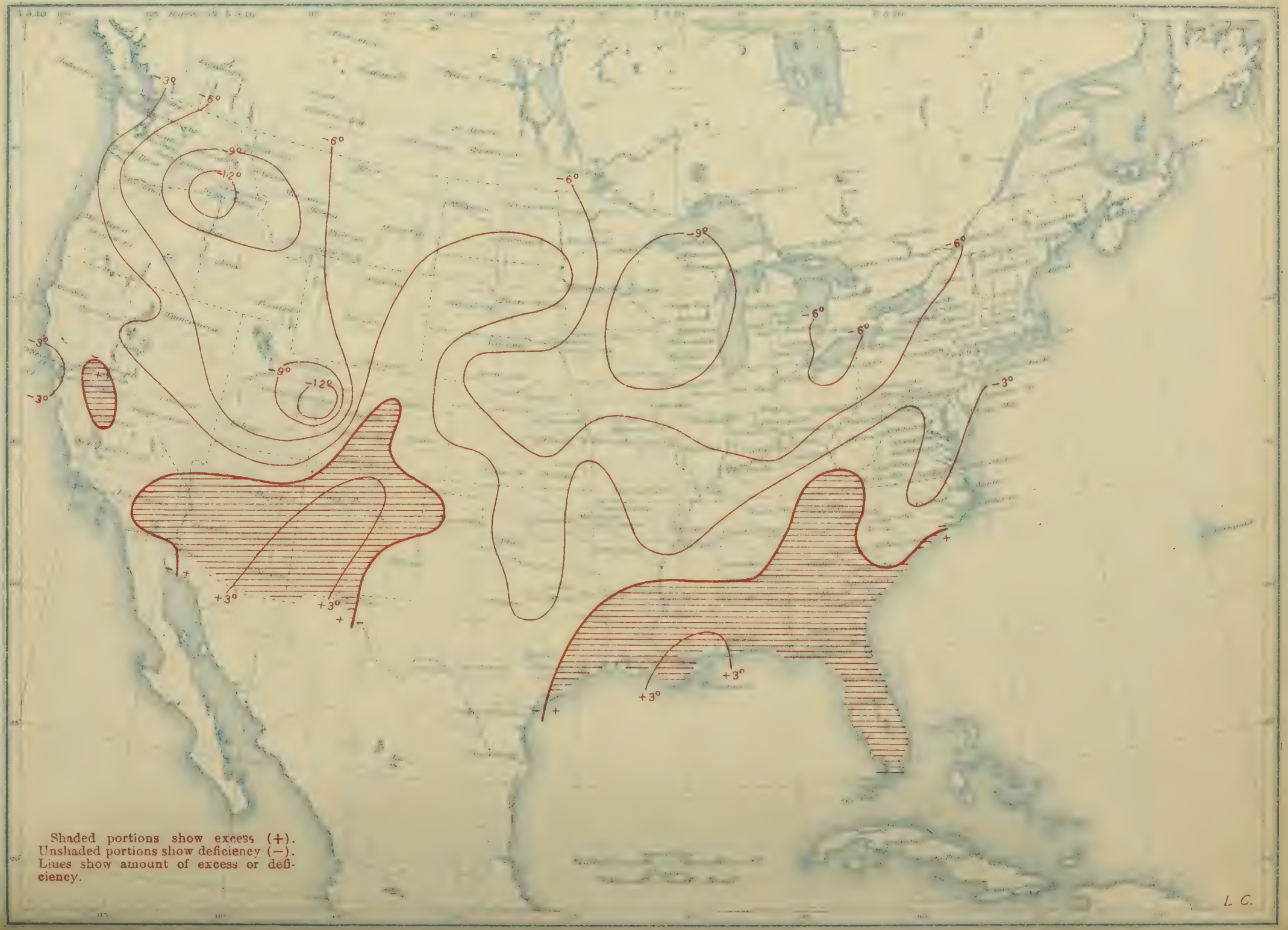
WEST VIRGINIA SECTION

DECEMBER, 1919

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MARCH 26, 1920

Departure of the Mean Temperature from the Normal, December, 1919.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVII. PARKERSBURG, W. VA., DECEMBER, 1919. No. 12

GENERAL SUMMARY.

December was considerably colder and wetter than usual, and was characterized by heavy rains and local floods and nearly continuous cold weather after the first decade. The precipitation was well distributed over the State but somewhat unfavorably distributed throughout the month. The snowfall was also somewhat above the normal and the snow-cover was sufficient to protect winter grains, which were in good condition at the close of the month. Outdoor work, however, was much delayed by the unfavorable weather conditions.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.18 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.85 inches on the 10th, and 29.42 inches on the 7th. Elkins, 30.84 inches on the 11th, and 29.40 inches on the 7th.

TEMPERATURE.

The monthly mean for the State, determined from 46 stations, was 30.4°. The departure from the normal for 41 stations having ten or more years of record was —3.1°. The temperature was below the normal from the 1st to the 5th, on the 10th and 11th, and from the 13th to the 30th, except the 27th, when the average was slightly above the normal, with the lowest readings occurring generally on the 15th, 18th, and 20th. Seasonally warm weather prevailed from the 6th to the 9th and on the 12-13th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 81 per cent; 8 p. m., 74 per cent. The December averages for the same hours for the past 31 years are 83 and 76 per cent, respectively. Elkins, 8 a. m., 89 per cent; 8 p. m., 79 per cent. The December averages for Elkins for the same hours for the past 19 years are 86 and 80 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, determined from 60 stations, was 4.07 inches. The departure from the normal for 43 stations having ten or more years of record was +0.74 inch. The precipitation was lightest over the eastern panhandle and southeast counties. As a rule, the heaviest amounts were recorded in the central and mountain counties. The greater part of the precipitation was received on the 6-7th, 9-10th, 13-14th, 17-19th, and 29-30th, the greatest amounts being recorded on the 7th, 9th, and 13-14th. Light snow or snow flurries occurred in many localities on the 6th, and light to moderate snows on the 14th and 17-19th. Light snow or snow flurries also occurred on the 24th and from the 27th to the 30th.

RIVERS.

Heavy rains on the 6-7th and 13-14th caused moderate to marked rises in the streams and smaller rivers. A flood stage of 23.9 feet occurred at Glenville on the 7th. The following crest stages were also noted: Creston, 18.6 feet on the 7th; Charleston, 26.6 feet on the 7th; Fairmont, 22.9 feet on the 8th; Rowlesburg, 9.6 feet on the 7th; Point Pleasant, 35.5 feet on the 9th. On account of floating ice, navigation was suspended on the Ohio and Little Kanawha rivers from the 20th to the close of the month.

WIND.

The average wind velocity at Parkersburg was 6.2 miles per hour, or 0.1 mile above the December average for 29 years. The average at Elkins was 5.8 miles per hour, or 1.4 miles above the December average for 20 years. The highest velocity at Parkersburg was 32 miles per hour from the west on the 10th, and at Elkins 31 miles per hour from the west on the 30th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 30 per cent of the possible amount, or 3 per cent above the December average for 22 years. The average at Elkins was 36 per cent, or 6 per cent above the December average for 20 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bluefield, 22d and 23d; Charleston, 22d and 23d; Elkins, 21st, 22d, 23d, and 31st; Fairmont, 22d and 31st; Hinton, 23d; Mannington, 22d; New Cumberland, 4th; Parkersburg, 22d; Pickens, 19th; Point Pleasant, 22d and 23d; Robertsburg, 21st, 22d, and 23d; Romney, 8th, 9th, and 13th; Wellsburg, 22d; Wheeling, 2d, 4th, 18th, 20th, 21st, 22d, 23d, and 31st; Williamson, 21st, 22d, and 23d.

Halo, solar: Elkins, 11th.

Haze: Grafton, 22d.

Sleet: Bancroft, 19th; Burlington, 6th; Marlinton, 6th and 14th; Piedmont, 6th; Romney, 6th and 14th; Wardensville, 6th.

Thunderstorms: New Cumberland and Wellsburg, 13th.

COMPARATIVE DATA FOR DECEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	40.9	75	6	3.27	....	....	....	..	..	..
1892	34.1	72	-10	2.91	....	....	....	..	..	..
1893	37.1	76	7	2.05	3.73	0.56	....	10	8	13
1894	36.3	80	-29	4.04	6.56	1.71	....	11	7	13
1895	36.9	72	- 6	2.87	4.14	1.85	7.1	8	9	14
1896	35.3	67	2	1.68	2.88	0.57	....	12	9	10
1897	37.3	72	- 4	4.00	6.79	2.05	....	6	9	16
1898	33.4	69	-12	2.66	4.23	0.71	7.0	12	8	11
1899	33.3	77	-17	2.81	4.46	1.22	3.9	11	8	12
1900	34.6	66	3	2.26	3.45	1.32	1.0	11	7	13
1901	32.3	75	- 9	5.84	8.97	3.57	3.8	7	8	16
1902	33.9	70	- 2	5.33	9.05	2.01	9.4	5	7	19
1903	26.5	59	-11	2.00	4.43	0.30	7.8	12	8	11
1904	32.8	71	-20	3.12	5.91	1.63	9.8	8	7	16
1905	35.6	70	3	3.11	5.24	1.30	3.4	11	6	14
1906	35.9	70	- 1	4.73	11.15	1.83	6.2	5	6	20
1907	35.5	70	- 2	3.36	9.31	0.70	5.2	9	7	14
1908	36.4	73	5	3.03	7.36	1.06	6.0	9	8	14
1909	28.8	78	-10	2.55	6.00	1.16	10.9	9	8	14
1910	28.4	72	- 8	2.72	6.90	1.00	14.6	7	7	17
1911	39.3	74	4	3.27	5.58	1.25	1.6	9	5	17
1912	35.8	76	- 6	2.88	5.55	1.45	7.1	12	7	12
1913	36.4	68	3	2.82	3.81	1.10	2.9	9	8	14
1914	30.3	70	-20	5.46	8.04	2.58	12.5	7	4	20
1915	32.8	68	0	4.35	7.19	1.35	7.6	5	7	19
1916	32.8	77	-18	3.33	6.38	0.85	10.6	13	7	11
1917	24.3	67	-37	1.51	3.32	0.47	11.8	11	6	14
1918	41.0	74	0	4.41	8.11	2.70	3.2	8	6	17
1919	30.4	72	-15	4.07	7.35	1.17	7.8	10	6	15
Means and extremes ..	34.1	80	-37	3.33	11.15	0.30	7.0	9	7	15

Climatological Data for December, 1919.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.						Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																			
Bayard	Grant	2,700	18																G. C. Dixon.
Brandywine	Pendleton		3	31.7		62	9	− 5	20	44	1.47			5.0	8	19	2	10	n.	Elmer Keister.
Burlington	Mineral	875	25	26.8	− 5.8	60	7	− 4	20†	37	3.05	+0.39	1.45	10.0	10	9	14	8	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	30								1.17	−1.54	0.40	2.0	8				e.	S. W. Lightner.
Martinsburg	Berkeley	435	27	28.2	− 4.6	62	7	5	21†	38	2.21	−0.49		5.2	11	14	8	9	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	23	31.0	− 2.3	67	12	− 7	20	44	1.94	−0.34	0.83	7.0	9	26[a]	0[a]	4[a]		M. S. Henkel.
Piedmont	Mineral	919	6	27.6		59	12	0	18	37	2.36		0 60		12	10	11	10	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	21	30.0	− 2.3	64	7	− 5	20	39	2.63	+0.13	1.00	4.0	11	9	11	11		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	20	30.2[b]	− 3.7	65[b]	14	− 4[b]	20	51[b]	1.31	−0.97	0.60	4.0	5	13	6	12	w.	J. M. Mallow.
Wardensville	Hardy	1,200	1	26.6[c]		65[c]	12	− 5[b]	19[b]	46[b]	2.17		0.80	2.2	7	13	5	11	sw.	Luther F. Sutton.
Averages and extremes				29.0	− 3.7	67	12	− 7	20	51	2.03	−0.47	1.15	4.9	9	14	7	10	nw.	
Northern Division.																			
Bens Run	Pleasants	622	17	31.2	− 2.0	65	13	3	20	35	4.92	+1.00	1.11	14.0	11	16	8	7		J. D. Riggs.
Brandonville	Preston	1,809	8																	W. H. Miller.
Buckhannon	Upshur	1,411	22	30.7	− 2.2	72	9	0	18	39	5.00	+0.91	1.50	15.0	6	10	5	16		H. A. Darnall.
Cortland	Tucker	3,300	3																	Samuel Harmon.
Creston	Wirt	701	17	31.5	− 2.5	67	9	− 4	20	43	4.31	+1.04	1.60	8.8	10	10	3	18	w.	J. M. Reed.
Davis	Tucker	3,093	10																	Branson Harper.
Elizabeth	Wirt	646	7								3.22		0.87		11					E. D. Ball.
Elkins	Randolph	1,947	18	29.1	− 3.4	68	9	− 6	17	44	4.73	+1.31	1.39	20.5	17	4	9	18	w.	U. S. Weather Bureau.
Fairmont	Marion	883	13	29.4	− 3.3	68	9	2	18	49	3.75	+0.29	1.12	11.5	10	12	0	19	w.	F. P. Hall.
Glenville	Gilmer	738	25	32.8	− 2.2	71	12	0	21	46	4.96	+1.22	1.99	12.8	11	9	11	11	w.	Howard R. Brannon.
Grafton	Taylor	1,000	26	30.7	− 3.3	70	9	− 2	18	44	4.26	+0.63		11.0	8	7	10	14	e.	W. C. Byers.
Lost Creek	Harrison	1,026	21	31.8	− 1.6	68	9	− 3	18	44	4.60	+1.07	2.01	14.0	11	11	2	18	w.	Allen Smith.
Mannington	Marion	974	16	29.2	− 3.3	66	9	− 8	20	42	4.31	+0.92	1.11	7.2	13	7	6	18	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	26	27.7[d]	− 6.3	63[d]	13	0[d]	18[d]	30[d]	3.45	+0.25		10.0		6[e]	2[e]	18[e]		Prof. E. L. Andrews.
Moundsville	Marshall	642	16	30.0	− 3.7	65	11	− 2	19	44	3.42	+0.37	1.05	6.5	7	4	6	21	sw.	J. Z. Terrell.
New Cumberland	Hancock	987	21	26.0	− 5.0	60	13	− 3	18†	36	2.69	+0.13	0.93	8.7	11	8	12	11	nw.	M. F. Smith.
New Martinsville	Wetzel	634	25	30.2	− 4.7	63	13	− 2	20	40	4.05	+0.43	1.15	5.0	7	8	6	17	n.	Wm. Ankrom.
Parkersburg	Wood	638	32	30.4	− 4.8	65	13	2	20	35	4.07	+1.30	1.64	7.5	11	6	7	18	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	19	29.2	− 2.2	69	9	− 9	18	43	3.79	+0.01		5.0	7	9	8	14		J. W. Swisher.
Philippi	Barbour	1,149	22																	Attic G. Robinson.
Pickens	Randolph	2,697	16	29.6	− 2.7	64	9	− 2	18	43	7.35	+2.32	1.78	39.0	17	10	4	17	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	32								4.87	+1.20	1.80		12				w.	J. F. Pierce.
Saint Marys	Pleasants	577	10								4.90	+1.40	1.77	7.5	12				n.	Wm. Hughes.
Smithfield	Wetzel	835	13	27.2	− 4.6	65	9	− 15	20	55	4.14	+0.08	1.47	8.7	11	13	6	12	ne.	G. M. Whisler.
Terra Alta	Preston	2,612	18	25.8	− 4.7	64	9	− 7	18	46						9	6	16	w.	W. J. Grimm.
Wellsburg	Brooke	1,225	18	27.2	− 3.5	62	13	− 6	20	43	3.05	−0.16	1.15	7.0	9	5	9	17	w.	George P. Pfister.
Weston	Lewis	1,026	23	30.1	− 5.0	70	8	2	17	53	5.39	+1.68	1.92	17.5	13	8	8	15	ne.	Weston State Hospital
Wheeling	Ohio	645	32	26.8	− 6.8	64	12	0	18[f]	54	3.39	+0.40	0.91	9.6	11	5	8	18	w.	Miss M. B. Forsyth.
Averages and extremes				29.4	− 3.7	72	9	−15	20	55	4.29	+0.81	2.01	11.8	11	8	7	16	w.	
Southern Division.																			
Bancroft	Putnam	574	15	32.7	− 2.8	70	9†	6	20	50	4.70	+1.57	1.90	6.8	8	24	0	7	nw.	R. E. Dent.
Beckley	Raleigh	2,440	19																	John A. Ewart.
Bluefield [a]	Mercer	2,558	24	35.2	+ 0.2	64	9†	9	15	42	2.63	−0.32	1.05	7.9	13	14	12	4		Norfolk & Western Ry.
Breading	Mingo	507	2																	Emory R. Noel.
Camden-on-Gauley	Webster	2,062	4								5.99		2.60	6.0	10	6	1	24	n.	Miss Katie Jarvis.
Charleston	Kanawha	597	16	37.7	− 2.3	72	9	5	15	49	4.43	+1.14	2.20	7.0	9	6	0	25	n.	C. Y. Lewis.
Clay	Clay	706	3								4.89		1.87		8					Prof. E. H. Knabenshue.
Cuba	Jackson	650	17	32.0[a]	− 1.9	71[a]	9	−10	20	47[a]	4.98	+1.76	1.30	6.0	7	8	17	6	w.	Miss Faythe Howard.
Dam 19 O. R	Wood	557	3								5.01		1.75	6.5	10					Lockmaster.
Dam 20 O. R	Wood	551	3								5.40		2.60	7.0	11					Lockmaster.
Dam 22 O. R	Jackson	538	4								4.97		2.20	6.5	7					Lockmaster.
Dam 26 O. R	Mason	505	3								4.40		1.80		5					U. S. Engineer Office.
Evans	Jackson	606	7	32.8		64	9	− 2	20	38	4.89		1.36	5.5	8	12	5	14		B. F. Sayre.
Gary	McDowell	1,426	3								3.43		1.41		13					U. S. Coal & Coke Co.
Gassaway	Braxton																			W. H. Gwinn
Green Sulphur Spgs	Summers	1,600	23																	H. A. Hays.
Hinton	..do	1,450	22	31.4	− 4.2	70	9	13	15†	54	3.58	+0.75	2.40	1.0	8	10	1	20	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	7	31.6		66	9	3	15	47	5.53		1.61	14.2	15	10	4	17		W. C. Williams.
Huntington	Cabell	538	25	32.0	− 2.4	66	9	12	21	47	5.28	+2.10	2.26	3.3	8	7	2	22		L. H. Hutchinson.
Kanawha Falls	Fayette	618	0								4.14		2.49	1.0	4					J. O. Brown.
Kayford	Kanawha	1,335	3								5.44		3.15	5.0	10					Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	19	31.0	− 1.5	63	9†	5	20	42	3.20	+0.42	1.12	1.0	5	12	6	13	nw.	Geo. T. Argabate.
Logan	Logan	687	16																	Agent C. & O. Ry.
Madison	Boone	704	13																	S. E. Bradley.
Marlinton	Pocahontas	2,131	20	26.0	− 3.8	58	9	− 8	20	38	5.21	+2.05	3.36	6.5	9	7	14	10	nw.	S. L. Brown.
Point Pleasant	Mason	553	26	32.7	− 2.5	67	9†	− 1	20	46	5.12	+1.90	1.53	3.0	7	10	3	18		W. D. Holmes.
Powellton	Fayette	933	24	34.9	− 1.2	71	9	12	24	42	4.85	+2.01	1.50	1.5	15	16	2	13		Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	3								4.79		2.58	3.6	10					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	3								3.68		2.46		7					Wm. B. Hill.
Robertsburg	Putnam	574	19	30.4	− 4.0	65	12	0	20†	47	4.69	+1.08	1.96	4.5	7	5	2	24	w.	E. C. Brace, Jr.
Ryan	Roane	700	16	31.1	− 3.0	68	12	− 5	20	48	4.46	+1.02	1.37	7.1	15	12	5	14		Wm. E. Ryan.
Sissonville	Kanawha	625	3																	J. N. Johnson.
Spencer	Roane	784	15																	A. M. McKown.
Sutton	Braxton	839	13	30.2[c]	− 2.5	61[c]	9†	7[c]	18	41[c]	3.43	−0.30	1.60	10.0	7	10[b]	6[b]	13[b]		Lawrence Freeman.
Union	Monroe	2,250	15	33.4	+ 1.6	66	9	10	15	40	2.60	+0.17	1.00		4					Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	9																	J. M. Ayres.
Williamson	Mingo	660	19	35.8	− 1 4	72	9	15	15	48	5.46	+1.53	2.70	0.9	7	10	4	17	w.	J. F. Keyser.
Averages and extremes				32.4	− 2.1	72	9	−10	20	54	4.54	+1.13	3.36	5.3	9	11	5	15	w.	
State averages and extremes				30.4	− 3.1	72	9	−15	20	55	4.07	+0.74	3.36	7.8	9	10	6	15	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

z Approximated by the observer.

Daily Precipitation for December, 1919.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac																																
Brandywine	do						*	.75	*	.20				.20				.08											.16	.08			1.47
Burlington	do						*	1.45	.28					.38	T.	.08			.20	.30	.16								.10		.10		3.05
Harpers Ferry ‖	do							.10		.22		.10			.10	T.	.40	T.	.05										.10		.10		1.17
Martinsburg	do					T.	*	.37	*	*	.67			*	.65		.15		*	.27									.10				2.21
Moorefield	do						.83		.03	.14	.15			.04	.17			.08	.32	T.					T.					.18	T.		1.94
Piedmont	do						.24	.60	.04	.11	T.			.43	.08			.12	.28	.19					T.				.06	.12	.09		2.36
Romney	do						*	.58	*	.35				*	.36			1.00	*	.24									*	.10			2.63
Upper Tract	do						.10	.60	T.		.27						T.	.10	.24										T.		T.		1.31
Wardensville ‖	do						.02	.80	.75					.34	.15			T.	.03	.08					T.			T.	T.				2.17
Northern Division.																																	
Bens Run	Ohio					.07	.38	1.06		1.00	.11			1.11	.32			.24	.32						.16				.15				4.92
Brandonville ‖	Monongahela																																
Buckhannon	do					T.	.75	1.15	T	T.	T.			1.50	.40	T.		.70		.59					T.	T.			T.	T.	T.		5.00
Central Station	Middle Is. Creek																																
Cortland ‖	Monongahela																																
Creston ‖	Little Kanawha					.02	T	1.60		.50	.22			.57	.96	T.		T.	.03	.36	T.				T.	T.			.02	.03			4.31
Davis ‖	Monongahela																																
Elizabeth ‖	Little Kanawha						.23	.25		.82	.08			.44	.87			.03	.04	.40									.05	.01			3.22
Elkins***	Monongahela		T.	T.		.03	1.20	.25	T.	.16	.08			1.09	.43	.02	.04	.45	.29	.28	T.				.13	.01		T.	.10	.98	.09	T.	4.73
Fairmont ‖	do					T.	T.	1.12		.56	.10	T.		.38	1.12	T.	T.	.23	T.	.12	.03				.03	T.			T.	T.	.06	T.	3.75
Glenville ‖	Little Kanawha					.03	.10	1.90		.25				.68	1.15			.24	.20	.28										.05	.08		4.96
Grafton	Monongahela					T.	*	1.57		.28	.17			*	1.52			.48	T.	.24					T.				T.	T.	T.		4.26
Lost Creek	do					.06	.46	1.55		.13	T.			1.25	.32	T.	T.	.35	.04	.52					T.				.06	.06			4.60
Mannington	do					.04	.22	1.01		1.06	.09			1.11	.35		T.	.20	.02	.08					.07				.01	T.	.05		4.31
Morgantown	do					T.	.15	*	*	*	*	*	*	2.50	.32			.48	T.						T				T.				3.45
Moundsville	Ohio						1.05		.90				.95	.18			.28	.03						.03									3.42
New Cumberland	do		T.			T.	.42	.18		.48	T.			.93	.08	.03	.01	.16		.16					.08			T.	T.	.16			2.69
New Martinsville	do		T.			T.	.75	.75		.95				1.15	.20			.15	T.	.10					T.								4.05
Parkersburg ***	Ohio					T.	1.42	.22	.06	.87	.01			1.04	.17	T.		.04	.10	.09					T.	T			.05	T.	T.		4.07
Parsons	Monongahela					T.	.69	1.29	T.	*				1.41	.24	T.			T.	T.					.08		T.		T.		.08		3.79
Philippi	do																																
Pickens	do					.09	1.78	1.34		.10				1.22	.24	.08	.16	.80	.40	.32					.24	.08		.09	.09	.16	.16		7.35
Rowlesburg ‖	do					T	T.	1.80		.08	.32			.15	1.20		.08	.43	T.	.36	.05				T.	.16				.08	.16	T.	4.87
Saint Marys ‖	Ohio					.05	.25	1.77		.98	.18			.27	.98			.10	.08	.15					T.				.07	.02	T.		4.90
Smithfield ‖	Fishing Creek					.02	.05	1.47		1.15	.18			.58	.27	.04		.30	T.	.04										.94			4.14
Terra Alta	Monongahela																																
Wellsburg	Ohio		T			T.	.20	.55		.71				1.15	.16			.16		.04					.04						.04		3.05
Weston	Monongahela					.02	1.92			.17	T.	T.	.18	.58	1.29	.05	T.	.60	.20	.40					.05			T.	.10		T	.03	5.39
Wheeling ‖	Ohio	T.				T.	T.	.91		.68	.25			.52	.60	T.	T.	.19	T.	.11	.01				.05	T.					.05	.02	3.39
Southern Division.																																	
Bancroft ‖	Great Kanawha						.10	1.90		.40	T			.80	1.20					.16								.06	T.	.08			4.70
Beckley	do																																
Bluefield	do			T.				1.05	.10		.20	.05	.05			.16	.20		.08	.15	.05				T.				.24		.20	.10	2.63
Breading	do																																
Camden-on-Gauley ‖	do	2.60				T.				T.					.17			.03	.06				.24		.09	1.00	.80		.09	.82			5.90
Charleston ‖	do					T.	.20	2.20		.20	.15			.25	1.00	T.		T.	T.	.10	.15				T.				T.	.18	T.		4.43
Clay	do					.12	.22	1.87			.39			.45	1.24						.40									.20			4.89
Cuba	Sand Creek						1.30	.90		.95	.05			1.30	.16			T.		.32						T.		T.	T.		T.		4.98
Dam 19 O. R. ‖	Ohio					T.	.20	1.75		1.14	.15			.64	.90	T.		T.	.03	.17	T.				T.	T.			.01	.02	T.	T.	5.01
Dam 20 O. R. ‖	do					.02	.03	2.60		.95	.15			.45	.86	T.		T.	.03	.30	T.				T	T.			.01	.02	T.		5.40
Dam 22 O. R. ‖	do						T.	2.20		.85	.15	T.	.05	.52	.84					.39						T.	T.						4.97
Dam 26 O. R. ‖	do						.20	1.80		.70				.90	.80																		4.40
Evans	Ohio					T.	.79	1.36		.76	.14			1.30	.24			T.	T.	.25									T.	.05			4.89
Gary ‖	Big Sandy					.09	.14	1.41		.13	.37			.02	*	.80				*	.20				*			*	*	.27	T.		3.43
Gassaway ‖	Great Kanawha																																
Green Sulpr. Spgs	do																																
Hinton ‖	do						.04	2.40		.22	.14			T.	.54			T.	.04	T.	.08					T.			T.	.12	T.		3.58
Holcomb	do					.10	1.18	1.61	.09	.13	.32			.58	.49			.30		.24				.03	.06		.03	.08	.29			5.53
Huntington ‖	Ohio						.44	1.82		.48	.22			.80	1.26	T.			T.	T.	.16					T.	T.	.10	T.			5.28
Kanawha Falls ‖	Great Kanawha					T.	.26	2.49						T.	1.31			T.	T.	T	.08												4.14
Kayford ‖	do					T.	.22	3.15		.22	.31			.82	.15			.06		.20	T.				.03			T.	.23	T			5.44
Lewisburg	do						1.12	.91	.08					.60	T.			T.	T.	T.					T.	T.			.49				3.20
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do						1.92	1.44	.34	.06	T.			.74	.16		T.	.10	.15	.30					T.			T.	T.		T.		5.21
Point Pleasant	Ohio						.81	1.53		.89				1.20	.40					.25									.04	T.			5.12
Powellton	Great Kanawha					.05	1.50	1.40	.05	.24				.83	.12			.08		.20		.04	.06				.05	.07	.05	.10			4.85
Raleigh ‖	do						.18	2.58		.28	.72				.82	.02		.01	T.						.61			.01	.16	T.			4.79
Renick ‖	do							2.46		.48	.20				.46				.01	.02					.05								3.68
Robertsburg ‖	do						.24	1.96		.65	.16	T.		.65	.85					.20									T.	T.			4.69
Ryan	do					.03	.99	.77		.16	.18			1.37	.38			.03	.02	.31					.03			.03	.07	.08	.01		4.46
Sissonville ‖	do																																
Spencer ‖	Little Kanawha																																
Sutton	Great Kanawha						.08	*	.95					1.60		.24		.40		.16													3.43
Union	do						1.00	.95						.15	.50																		2.60
White Sulphur Spgs	do																																
Williamson ‖	Big Sandy					T.	.36	2.70		.32	.24				1.33					T.	.23							T.	T.	.28	T.		5.46

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for December, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brandywine	Maximum	50	57	51	50	51	45	52	50	62	55	38	58	55	55	40	42	42	40	41	28	27	40	50	42	36	45	46	46	40	38	52	46.0
	Minimum	19	22	15	6	18	22	35	34	31	25	8	25	45	22	12	15	14	2	10	−5	0	2	9	24	12	12	26	22	22	17	18	17.4
Burlington	Maximum	41	55	33	34	42	35	60	43	42	53	32	53	49	51	27	37	37	42	17	20	25	29	37	41	32	48	44	37	30	38	41	37.9
	Minimum	24	22	17	8	15	27	32	32	34	20	11	20	32	19	15	17	1	2	10	−4	−4	−2	3	14	12	11	27	22	18	18	15	15.7
Martinsburg§	Maximum	40	49	30	32	40	36	62	39	47	37	34	54	52	34	29	38	19	15	17	25	26	27	32	37	31	40	42	37	39	39	43	36.2
	Minimum	26	26	21	14	15	26	29	35	35	36	16	16	34	32	17	16	17	8	9	9	5	5	8	14	19	16	20	35	26	23	22	20.3
Moorfield	Maximum	62	60	52	41	53	53	65	54	48	47	35	67	61	56	32	39	38	16	18	30	30	35	40	40	36	54	49	40	38	40	46	44.4
	Minimum	21	21	19	9	15	24	32	32	35	25	11	26	32	26	20	15	15	3	11	−7	−3	−4	3	17	13	10	31	30	24	22	18	17.6
Piedmont	Maximum	40	54	39	31	39	35	57	38	43	47	30	59	49	52	22	34	35	9	16	32	25	29	38	40	29	48	39	36	30	36	39	37.1
	Minimum	24	25	20	10	18	27	31	34	34	19	12	22	35	15	14	13	6	0	9	6	4	5	12	22	17	14	32	30	20	19	15	18.2
Romney	Maximum	43	60	51	38	45	37	64	50	49	40	39	52	52	52	30	37	39	24	18	30	29	35	42	46	42	50	47	40	35	38	45	41.9
	Minimum	25	21	17	8	15	26	32	32	33	23	9	19	35	24	13	15	13	2	10	−5	−1	0	7	32	19	13	31	31	23	18	17	18.0
Upper Tract	Maximum	60	60	60	59	58	60	61	52	60	63	35	39	..	65	50	49	36	17	16	34	29	34	48	45	44	45	..	51	40	40	53	47.0
	Minimum	19	19	18	9	7	10	11	30	24	22	10	12	..	15	16	14	14	0	8	−4	−1	3	10	12	14	16	..	18	20	21	18	13.3
Wardensville	Maximum	51	53	45	52	50	62	60	51	35	48	52	65	40	27	25	20	14	8	12	25	29	34	32	34	36	42	54	..	..	52	..	39.6
	Minimum	20	19	23	6	10	16	20	30	24	8	14	28	35	25	13	14	11	1	−5	−2	−5	−2	2	6	10	18	20	21	..	..	14	13.6
Northern Division.																																	
Bens Run	Maximum	43	47	34	40	36	38	51	48	64	53	46	63	65	37	25	35	35	19	26	25	37	39	47	37	36	39	38	37	30	37	55	40.7
	Minimum	24	29	28	14	23	30	35	34	41	18	13	30	36	18	13	14	9	8	17	3	10	14	20	24	20	19	32	28	15	29	21	21.6
Buckhannon	Maximum	40	33	31	35	35	52	56	44	72	54	43	64	60	45	22	32	32	19	25	29	38	40	42	46	27	42	37	37	30	35	56	40.5
	Minimum	21	27	19	13	22	29	40	35	41	19	13	28	45	18	10	16	8	0	18	18	4	11	18	24	20	13	33	28	21	20	17	20.9
Creston	Maximum	44	49	38	42	45	54	50	46	67	60	48	65	64	43	28	38	35	20	23	32	36	41	46	39	33	41	39	38	33	39	58	43.0
	Minimum	20	28	22	12	27	21	38	35	40	17	12	28	43	20	12	15	13	10	17	−4	2	8	15	23	20	12	30	25	18	24	18	20.0
Elkins	Maximum	41	50	29	39	35	55	58	51	68	52	42	66	57	42	21	33	31	17	25	32	38	41	46	38	27	45	36	35	24	34	57	40.8
	Minimum	21	25	13	9	19	27	34	32	45	12	9	38	42	11	10	14	6	5	17	8	0	10	15	17	8	8	31	24	16	23	13	17.4
Fairmont§	Maximum	39	49	34	39	34	53	51	48	68	26	45	64	57	29	25	34	21	21	23	34	43	45	48	31	30	42	35	34	36	35	57	39.7
	Minimum	21	23	16	13	14	30	31	35	36	20	14	15	40	24	12	10	15	2	9	7	6	9	14	21	21	15	24	32	22	19	18	19.0
Glenville	Maximum	50	55	54	45	40	53	60	46	69	62	48	71	66	49	29	40	39	26	25	38	42	43	49	45	37	43	40	40	36	40	58	46.2
	Minimum	18	25	23	11	19	30	40	34	42	18	10	25	47	21	11	15	12	6	12	2	0	6	14	20	20	10	30	21	18	23	18	19.4
Grafton	Maximum	38	50	33	36	34	52	54	51	70	60	46	64	58	53	30	33	46	19	44	22	32	36	43	43	30	42	38	36	45	33	37	42.1
	Minimum	19	24	15	8	20	30	40	34	43	16	11	29	42	17	10	11	6	−2	16	12	0	8	19	23	19	11	29	30	18	24	15	19.3
Lost Creek	Maximum	40	50	36	41	35	55	52	45	68	62	51	66	64	51	24	34	34	16	22	33	42	45	50	47	30	41	39	35	31	35	56	42.9
	Minimum	18	22	15	8	17	29	40	33	42	18	10	26	49	20	10	14	10	−3	16	11	−1	25	24	25	20	22	33	29	18	22	21	20.7
Mannington	Maximum	45	46	33	38	34	37	53	46	66	57	40	63	64	48	22	28	34	16	22	26	37	42	48	36	27	40	37	35	29	35	54	39.9
	Minimum	20	24	14	10	19	29	37	33	43	18	11	25	45	18	13	11	10	−3	16	−8	−1	5	15	22	21	11	33	29	18	22	12	18 5
Morgantown	Maximum	38	45	34	36	33	49	54	45	..	..	..	62	63	46	22	28	27	10	19	27	36	44	..	39	24	36	38	35	28	30	48	36.9
	Minimum	21	29	15	..	25	36	..	17	12	37	13	16	41	16	11	9	8	0	0	3	7	16	..	22	17	18	21	26	18	20	27	18.5
New Cumberland	Maximum	38	33	31	34	31	43	43	43	54	52	29	58	60	32	19	19	19	14	20	26	37	42	45	39	25	34	34	32	24	34	48	35.2
	Minimum	18	24	11	8	21	26	32	29	36	16	9	27	30	13	10	4	6	−3	9	−3	7	8	13	22	18	16	31	23	17	19	21	16.7
New Martinsville	Maximum	47	44	33	40	35	38	50	46	61	58	36	62	63	52	24	28	27	18	25	24	38	42	47	37	30	39	38	38	29	38	55	40.1
	Minimum	22	27	18	13	22	30	36	34	40	18	13	28	38	20	13	11	9	5	17	−3	6	16	18	22	20	18	33	28	18	22	18	20.3
Parkersburg	Maximum	38	42	31	37	37	52	53	46	61	35	41	64	65	30	26	36	36	20	24	26	36	40	45	35	29	39	39	37	31	38	54	39.5
	Minimum	25	25	21	17	28	30	37	35	35	16	14	39	30	15	14	16	10	10	13	2	7	10	20	22	19	20	33	25	16	27	26	21.2
Parsons	Maximum	43	53	39	40	35	39	40	48	69	51	49	57	60	40	40	33	25	15	23	35	40	44	49	36	29	45	38	37	33	33	52	41.3
	Minimum	18	21	15	5	16	27	38	32	40	16	8	31	40	15	16	11	1	−9	14	15	−3	5	9	14	15	5	32	31	20	20	10	17.0
Philippi	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Pickens	Maximum	42	50	30	39	33	50	53	52	64	54	42	56	56	51	20	30	30	28	36	30	39	41	47	37	32	31	34	35	30	32	52	40.5
	Minimum	18	23	15	10	21	20	34	34	50	11	8	31	49	10	5	18	2	−2	20	1	14	22	18	21	13	13	28	25	14	13	22	18.7
Terra Alta	Maximum	35	43	30	33	29	40	49	40	64	57	31	58	58	51	15	23	27	7	17	28	38	41	44	37	20	37	32	38	27	28	48	36.3
	Minimum	17	26	10	5	21	22	33	29	31	11	5	21	50	13	6	6	2	−7	5	9	10	12	19	16	11	11	11	25	13	13	19	15.3
Wellsburg	Maximum	38	36	32	32	34	36	50	44	56	60	33	50	62	35	22	26	22	17	23	25	36	32	40	36	25	35	36	37	27	35	49	36.2
	Minimum	22	25	13	9	16	29	34	31	41	17	11	28	32	18	12	18	9	−1	12	−6	6	9	15	24	18	12	32	24	19	22	15	18.3
Weston	Maximum	53	34	40	35	58	55	47	70	26	55	67	58	26	26	37	26	22	23	33	40	40	48	31	31	44	36	35	37	36	58	35	40.7
	Minimum	23	20	13	15	30	30	36	37	20	14	14	30	24	12	13	16	2	9	16	4	5	11	20	21	15	30	29	21	19	18	19	19.5
Wheeling§	Maximum	40	39	34	38	35	50	43	47	58	26	45	64	57	28	28	26	19	17	25	24	27	29	49	31	32	34	37	34	36	35	35	36.2
	Minimum	23	23	12	12	15	30	30	32	32	20	6	10	45	22	13	8	10	0	10	0	4	7	7	21	20	20	20	30	21	20	20	17.5
Southern Division.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Bluefield	Maximum	54	54	49	38	48	59	62	57	64	62	36	61	61	..	32	35	31	33	35	37	15	46	54	49	26	41	44	40	23	34	54	45.8
	Minimum	24	31	28	25	30	32	34	28	53	20	19	32	32	..	9	19	24	18	28	22	20	22	23	26	16	19	20	20	19	21	27	24.7
Charleston	Maximum	56	56	54	54	56	58	59	72	60	59	64	65	51	43	50	43	39	43	49	51	45	50	52	41	37	39	43	45	50	55	60	52.2
	Minimum	26	23	20	18	20	38	37	45	45	20	10	18	43	23	5	6	20	15	16	16	20	25	25	26	23	19	22	35	21	22	23	23.2
Elkhorn	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Green Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Hinton§	Maximum	55	48	32	43	44	54	66	51	70	34	46	69	53	29	20	42	34	28	31	40	20	24	33	33	37	34	35	36	39	40	45	40.8
	Minimum	25	24	24	22	26	32	33	35	39	28	15	15	30	27	13	13	16	18	19	20	16	16	18	20	19	15	16	24	24	18	18	21.9
Holcomb	Maximum	44	51	43	39	35	46	57	53	66	59	59	64	56	52	26	34	33	31	34	31	43	44	47	37	26	46	35	40	33	35	56	43.7
	Minimum	19	24	22	13	22	27	41	31	48	16	12	30	40	15	3	18	12	6	24	9	13	14	13	23	12	16	23	20	16	11	11	19.5
Huntington§	Maximum	46	50	35	41	40	60	50	49	66	26	45	65	58	24	30	41	26	26	25	33	36	33	44	34	34	43	42	36	40	42	59	41.3
	Minimum	24	24	22	18	20	34	36	36	38	18	15	40	40	22	13	16	20	16	16	13	12	17	21	21	21	20	33	31	22	22	25	22.7
Lewisburg	Maximum	48	52	47	36	40	35	61	54	63	61	37	63	59	53	27	36	32	20	27	33	39	42	45	41	34	45	40	37	33	35	43	42.5
	Minimum	24	20	25	15	22	29	33	32	41	19	10	22	38	17	8	17	16	13	16	5	8	12	16	25	14	10	30	22	20	13	14	19.5
Marlinton	Maximum	42	44	40	38	40	54	54	52	58	52	32	54	50	46	30	32	30	16	26	30	34	38	42	34	30	40	34	32	30	32	44	38.4
	Minimum	16	14	12	8	22	22	32	30	36	14	6	18	36	14	4	14	8	4	12	−8	−4	0	10	20	8	2	20	22	14	12	6	13.7
Point Pleasant	Maximum	42	48	36	39	37	53	57	49	67	58	60	66	67	56	33	43	45	24	25	28	34	41	42	40	32	41	42	37	32	40	58	44.2
	Minimum	23	29	19	14	25	30	38	33	41	17	21	21	42	10	10	10	14	12	18	−1	6	11	17	28	20	18	35	28	19	26	24	21.2
Powellton	Maximum	44	54	46	38	42	57	59	47	71	63	44	64	64	54	30	36	39	31	34	30	36	37	38	40	31	45	39	36	35	41	55	44 5
	Minimum	25	29	28	23	27	30	32	35	45	21	16	34	52	21	14	20	21	18	26	22	19	25	23	12	12	23	31	28	24	24	24	25.3
Robertsburg§	Maximum	47	50	35	43	38	59	52	48	63	25	47	65	56	25	30	40	24	25	24	31	35	44	45	33	36	42	41	35	40	41	59	41.2
	Minimum	21	22	21	14	15	31	34	36	38	19	15	18	37	23	12	13	18	13	15	0	0	7	13	20	21	15	24	27	20	19	24	19.5
Ryan	Maximum	63	53	38	42	37	57	58	56	67	59	47	68	67	42	25	38	36	26	24	34	42	43	46	31	33	42	44	36	32	39	50	44.4
	Minimum	15	24	14	10	18	30	39	38	13	15	10	40	42	20	7	10	8	10	10	−5	3	5	12	13	18	10	11	21	19	24	19	17.8
Spencer	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Sutton	Maximum	39	44	43	40	39	52	..	50	61	61	38	60	60	..	27	35	35	20	25	25	35	33	37	37	30	40	..	34	34	34	41	39.6
	Minimum	20	25	23	13	21	31	..	37	42	20	12	26	42	..	11	27	11	7	17	18	15	12	18	22	21	11	..	24	20	23	17	20.9
Union	Maximum	60	61	62	36	43	46	50	55	66	61	41	65	65	55	30	32	37	25	28	33	34	40	47	56	32	47	46	38	40	38	54	45.9
	Minimum	24	23	22	19	22	30	30	35	36	21	12	25	42	25	10	15	17	14	18	13	15	14	18	22	14	12	30	20	21	17	16	21.0
White Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Williamson§	Maximum	48	43	35	42	44	60	59	65	72	30	48	68	61	36	32	40	38	36	38	36	43	38	42	46	35	45	40	35	41	40	50	44.7
	Minimum	28	28	30	30	28	35	40	38	40	25	20	20	38	26	15	17	20	24	25	25	26	25	28	28	21	21	24	30	25	25	28	26.9

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.
Based on 700 records.

WVE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

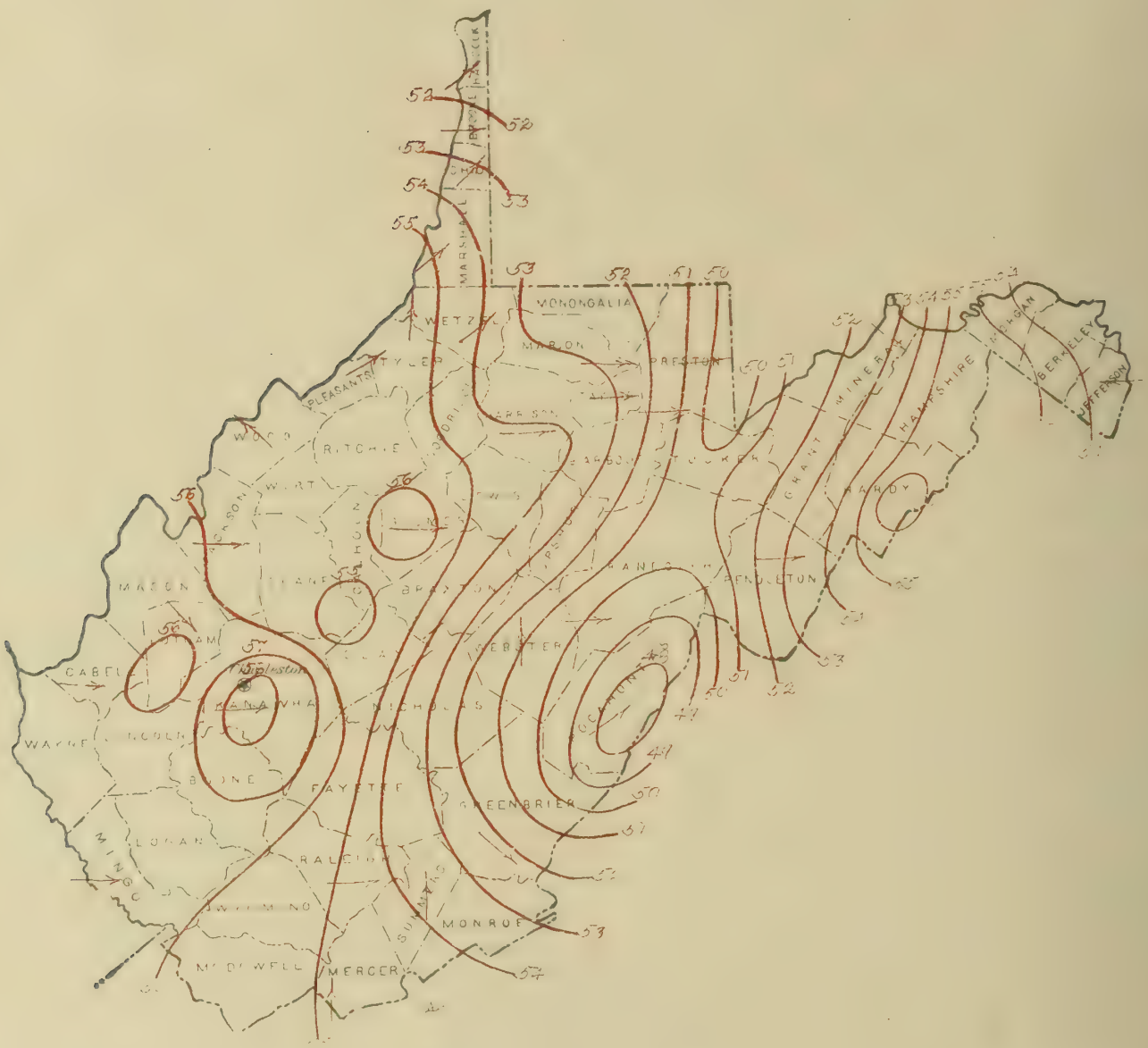
ANNUAL, 1919

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
OCTOBER 15, 1920

MEAN ANNUAL ISOTHERMS AND PREVAILING WINDS, 1919

LINES PASS THROUGH POINTS OF EQUAL TEMPERATURE. ARROWS FLY WITH THE PREVAILING WIND



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION

HENRY C. HOWE, Meteorologist.

Vol. XXVII. PARKERSBURG, W. VA., YEAR, 1919. No. 13.

GENERAL SUMMARY.

The year was considerably warmer and somewhat wetter than usual.

The winter and late fall months were warm, except December, and also June and July, June being exceptionally warm. The late spring and early fall months were cool. December was characterized by nearly continuously cold weather. The warm months early in the year were favorable for outdoor work and winter grains, and the high temperatures in June and July caused rapid growth. The last killing frosts in the spring occurred near the close of April, while the earliest general killing frosts in the fall occurred from November 3 to November 6, the lastest of record.

The late spring and early summer months were wet and favorable for rapid growth and there was ample moisture from January to June. The last of July was droughty, causing severe injury to potatoes. Although September was also too dry for late growth, the conditions were ideal for thrashing and corn cutting. While the year was free from general and destructive floods, slight to moderate floods were general in January and local floods in May, July, and November.

The average cloudiness was below the normal. The sunshine at Parkersburg averaged 46 per cent of the possible amount, or 1 per cent above the normal, and the average at Elkins was 48 per cent, or 4 per cent above the normal.

The wind movement at Parkersburg was 46,936 miles and at Elkins, 43,030 miles.

THE WEATHER BY MONTHS.

January.—January was exceptionally sunshiny and slightly warmer than usual. The precipitation was slightly below the normal and was unfavorably distributed over the State and throughout the month, the greater part of the rainfall occuring on the 1st-2d and practically all the snowfall in the agricultural districts from the night of the 2d to the night of the 3d. Moderate floods occurred in the Monongahela, Great Kanawha, and Little Kanawha Basins, and in the Ohio River from Point Pleasant southward. The highest temperatures occurred generally on the 1st, 21st, and 22d, while the lowest were recorded on the 5th. The conditions were favorable for outdoor work and considerable plowing was done.

February.—February averaged warm and was free from cold periods. The precipitation was the lightest of February record, except in 1894, 1901, and 1906. The snowfall was especially light, only traces being received in many of the agricultural districts. While the conditions were favorable for outdoor work, winter grains were damaged in some districts from lack of snow-cover. At the close of the month, however, winter grains were in good condition, owing to excellent and hardy growth in the late fall. The highest temperatures occurred on the 28th, while the lowest readings were recorded on the 11th.

March.—March was also warmer and drier than usual and free from cold periods. Lower temperatures were recorded in every other March of record, except in 1897, 1903, and 1908. The weather was exceptionally pleasant and the precipitation was well distributed and sufficient for all purposes. The snowfall was unimportant in the agricultural districts. Much plowing was done and early seeding was in progress at the close of the month. Winter grains were in excellent condition. Abnormally warm weather prevailed on the 3d-5th, 13-17th, and 25-26th.

April.—While April was dry, there was ample moisture for vegetation, as showers were frequent and well distributed. The temperature averaged practically normal. After the first three days the conditions were excellent for farm work and growth until the middle of the last decade, when freezing temperatures and heavy to killing frosts were general. Owing to dry conditions, however, no great damage resulted, except to peach, plum, and cherry bloom, which was killed in some sections. At the close of the month oats were mostly seeded, potatoes were being planted, and the ground was being prepared for corn.

May.—May was characterized by continuously cool and wet weather until the 27th. Planting and cultivation were much delayed and crops were flooded on creek bottoms in a few districts. Frost temperatures occurred in many localities on the 3d, 12th, and 19th, causing considerable damage to fruit. At the close of the month wheat and rye were in excellent condition, and corn planting was nearly completed. A moderate hail storm occurred at Moorefield, Hardy County, on the 9th, but not much damage resulted. Light hail occurred in several other counties. The highest temperatures occurred at the close of the month.

June.—June was continuously warm until the last decade, when there were two short periods of cool weather. It was the warmest June since 1892. The rainfall averaged considerably above the normal and was unfavorably distributed. Excessive rains and local floods caused considerable damage to crops in sections of Harrison County on the 14-15th and in a number of localities in the southern counties on the 24-26th. Hail also caused some damage. At the close of the month wheat was being harvested, with the yield good to excellent.

July.—July averaged considerably warmer and wetter than usual and the precipitation was unfavorably distributed over the State and throughout the month. Heavy to excessive rains from the 10th to the 16th and on the 20th caused much damage to crops in localities of the central and southern counties. A crest stage of 24 feet was reached at Glenville and the West Fork reached a high stage. Hail also caused much damage to crops in the Washington Bottom and Lubeck districts of Wood County. The conditions were droughty over the western counties during the last decade, causing servere damage to potatoes.

August.—August was considerably cooler and wetter than usual, with the sunshine slightly above the normal. The rainfall, however, was unfavorably distributed, the amounts received over the eastern panhandle and southern counties being insufficient for favorable crop growth. In practically all other districts the ground was kept moist and crops, pastures, and

meadows made excellent growth. The lowest temperatures occurred generally on the 27th, 28th, and 29th.

September.—September was dry, slightly cooler than usual, free from marked extremes in temperature, and exceptionally pleasant. While scattered light frosts occurred in the more elevated sections near the close of the last decade, practically no damage resulted and late growth was unimpeded. Corn ripened and winter grains were thrashed under favorable conditions. The ground, however, was too dry for plowing and seeding. At the close of the month corn cutting was nearly completed and the crop was generally excellent. The seeding of winter grains was well advanced and silos were being filled. The highest temperatures occurred generally from the 7th to the 10th and ranged from 82° to 98°.

October.—This month was the warmest, wettest, and cloudiest October of record for the State. The average precipitation exceeded 5 inches for only two other fall months of record. For September, 1900, the average was 5.20 inches and for October, 1911, 5.28 inches, while the average for the month under consideration was 5.84 inches. The rainfall, however, was favorably distributed. The temperature was below the normal for only six or seven days and the lowest recorded was 28°. There were no frosts in the agricultural districts. The rivers were at moderate stages from the 15th to the 21st and were rising at the close of the month. Winter grains made excellent growth but corn and buckwheat were damaged by the wet weather. The conditions were unfavorable for outdoor work.

November.—November was also warmer and wetter than usual, with about the normal amount of sunshine. The average precipitation, 4.51 inches, was exceeded in only one November of record, or in 1900. Killing frosts occurred over the State on the 3d and 6th, the latest of record for the first general destructive frosts. The conditions were generally unfavorable for outdoor work but favorable for winter grains and pastures. Stock was in good condition at the close of the month. Considerable corn was damaged or destroyed on bottom lands by heavy rains and flooding The warmest weather occurred on the 1st and from the 8th to the 12th and the 25th to the 30th.

December.—December was considerably colder and also wetter than usual, and was characterized by heavy rains and local floods and nearly continuously cold weather after the first decade. The precipitation was favorably distributed over the State but somewhat unfavorably distributed throughout the month. The snowfall was above the normal and the snow-cover was sufficient to protect winter grains, which were in good condition at the close of the month. Outdoor work, however, was much delayed by unfavorable weather conditions. The lowest temperatures occurred generally on the 15th, 18th, and 20th.

Dates on which First and Last Killing Frost Occurred or Minimum Temperature Fell to 32 Degrees.

Station.	Last in Spring.	First in Autumn.	Station.	Last in Spring.	First in Autumn.
Bancroft	April 27	Nov. 6	Morgantown	...	Nov. 5
Bens Run	April 27	Nov. 6	Moundsville	April 26	Nov. 2
Bluefield	April 27	Nov. 5	New Cumberland	April 29	Oct. 13
Brandywine	April 27	Oct. 19	New Martinsville	April 27	Nov. 6
Buckhannon	April 27	Nov. 6	Parkersburg	April 14	Nov. 3
Burlington	April 27	Oct. 19	Parsons	May 19	Nov. 3
Charleston	April 27	Nov. 6	Piedmont	April 27	Nov. 3
Creston	April 27	Nov. 6	Pickens	April 27	Oct. 19
Cuba	April 27	Nov. 5	Point Pleasant	April 27	Nov. 6
Elkins	April 27	Nov. 3	Powellton	April 27	Nov. 6
Evans	April 25	Nov. 6	Robertsburg	April 28	Nov. 3
Fairmont	April 27	Nov. 3	Romney	April 27	Oct. 19
Glenville	April 27	Nov. 3	Ryan	April 27	Oct. 20
Grafton	April 27	Nov. 3	Smithfield	April 27	Nov. 3
Green Sulphur Springs	April 28	...	Spencer	April 27	Nov. 6
Hinton	April 28	Nov. 6	Sutton	April 27	Nov. 7
Holcomb	April 27	...	Terra Alta	April 27	Oct. 18
Huntington	April 26	Nov. 6	Union	April 27	Oct. 19
Lewisburg	April 27	Oct. 19	Upper Tract	April 28	Oct. 19
Lost Creek	April 26	Nov. 3	Wardensville	April 27	Oct. 18
Mannington	April 27	Nov. 3	Wellsburg	April 27	Nov. 3
Marlinton	May 19	Oct. 20	Weston	April 27	Nov. 5
Martinsburg	April 26	Nov. 26	Wheeling	April 28	Nov. 3
Moorefield	April 27	Nov. 3	Williamson	April 27	Nov. 14

COMPARATIVE ANNUAL DATA FOR WEST VIRGINIA.

Year	Temperature			Precipitation
	Mean	Highest	Lowest	
1891	52.0	...	....	45.96
1892	52.1	99	−12	38.33
1893	52.0	99	−25	39.82
1894	53.5	103	−29	34.52
1895	51.5	107	−21	32.82
1896	53.6	97	−10	43.49
1897	53.5	103	−18	41.59
1898	54.8	103	−13	47.61
1899	53.2	100	−35	40.97
1900	54.1	101	−11	37.62
1901	52.1	104	−11	44.78
1902	52.8	104	−14	42.19
1903	52.0	105	−19	40.55
1904	50.9	98	−20	33.33
1905	52.3	100	−22	45.53
1906	54.0	101	−11	44.36
1907	51.7	98	−23	52.15
1908	53.7	101	−16	40.47
1909	53.0	101	−10	43.02
1910	52.3	98	−11	38.60
1911	54.6	106	− 5	47.13
1912	51.7	100	−34	43.78
1913	53.9	103	− 4	49.02
1914	52.3	106	−22	39.71
1915	52.8	101	− 8	43.76
1916	52.6	104	−18	44.63
1917	49.9	104	−37	44.33
1918	53.2	110	−27	44 77
1919	54.0	104	−16	47.27

TEMPERATURE AND PRECIPITATION FOR WEST VIRGINIA 1919.

Month	Temperature in degrees Fahrenheit				Precipitation in inches				Sky			Prevailing direction of the wind.
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest local amount	Number of rainy days	Clear	Pt. Cloudy	Cloudy	
January	34.1	+ 1.1	69	−16	3.79	−0.18	3.00	8	16	4	11	w.
February	35.2	+ 3.3	72	− 2	1.85	−1.20	2.00	9	11	5	12	w.
March	44.5	+ 1.7	81	12	2.92	−0.85	1.80	9	16	6	9	w.
April	51.8	− 0.1	90	8	2.44	−1.12	1.12	9	12	8	10	w.
May	61.5	− 0.9	100	30	5.25	+1.27	2.42	13	12	7	12	w.
June	73.0	+ 3.8	100	40	5.06	+0.51	4.10	10	16	8	6	sw.
July	74.3	+ 1.0	104	41	5.51	+0.92	3.87	10	18	7	6	w.
August	70.2	− 1.7	100	40	4.54	+0.75	2.30	11	16	9	6	w.
September	66.0	− 0.2	98	31	2.11	−0.81	2.00	5	18	7	5	w.
October	62.3	+ 7.6	102	28	5.84	+3.18	2.50	14	9	7	15	w.
November	44.4	+ 1.5	80	10	4.51	+2.07	2.75	10	12	6	12	w.
December	30.4	− 3.1	72	−15	4.07	+0.74	3.36	9	10	6	15	w.
Annual	54.0	+ 1.2	104	−16	47.89	+5.28	4.10	117	166	89	119	w.

CLIMATOLOGICAL DATA FOR THE YEAR 1919

Stations.	Counties.	Elevation, feet.	Temperature (degrees Fahrenheit).						Precipitation (inches).							Number rainy days.	Sky.			Prevailing direction of wind.
			Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month	Least monthly.	Month.	Total snowfall.		Number clear days.	Number partly cloudy days.	Number cloudy days.	
PANHANDLE DIVISION.																				
Bayard	Grant	2,700	18						18											
Brandywine	Pendleton		4	53.3	95	July 5	−10	Jan. 5	4	29.42	5.47	July	0.75	Sept.	17.0	97	227	49	89	s.
Burlington	Mineral	875	26	52.0	97	July 5	−10	Jan. 5	26	33.23	5.13	July	1.42	Sept.	21.0	80	131	170*	64	w.
Harpers Ferry	Jefferson	244							31	34.28	6.15	July	1.17	Dec.	7.5	82				e.
Martinsburg	Berkeley	435	28	53.6	100	July 4†	− 3	Jan. 5	28	39.92	7.25	June	1.85	Apr.	15.5	104	210	71	84	nw.
Moorefield	Hardy	900	24	56.0	102	July 4†	−10	Jan. 5	24	27.11	3.54	July	1.14	Feb.						
Piedmont	Mineral	919	4	52.9	98	July 4	− 4	Jan. 5	4	35.53	6.38	July	1.33	Sept.		134				nw.
Romney	Hampshire	824	23	55.1	102	July 4	−10	Jan. 5	23	38.67	5.03	July	1.40	Feb.	14.0					
Upper Tract	Pendleton	1,230	22	53.1	97	July 4†	−11	Jan. 5	22	24.94	4.50	July	0.35	Feb.		63				w.
Wardensville	Hardy	1,200	2				− 8	Jan. 5	2											
Averages and extremes				53.7	102	July 4†	−11	Jan. 5		32.89	7.25	June	0.35	Feb.	15.0	93	189	97	79	w.
NORTHERN DIVISION.																				
Bens Run	Pleasants	622	19	55.4	97	July 3†	1	Jan. 5	19	51.17	8.05	Aug.	1.52	Sept.	23.0	120	217	68	80	
Buckhannon	Upshur	1,411	24	53.3	93	July 4	− 9	Jan. 5	31	54.38	6.74	Oct.	2.10	Feb.	29.5	101	182	68	115	
Cortland	Tucker	3,300							5		6.94	July	0.96	Sept.						
Creston	Wirt	701	19	55.9	100	July 4	− 4	Dec. 20	19	51.62	7.40	Oct.	1.24	Sept.	14.2	121	180	24	161	sw.
Davis	Tucker	3,093							12		7.30	Oct.								
Elizabeth	Wirt	646							9	44.71	6.72	Oct.	1.16	Feb.		104				
Elkins	Randolph	1,940	20	50.9	92	May 31	−14	Jan. 5	20	49.01	8.75	July	1.94	Apr.	46.3	172	72	107	186	w.
Fairmont	Marion	883	15	54.0	101	July 4†	− 3	Jan. 5	28	45.90	5.86	Oct.	1.67	Feb.	21.5	144	218	24	123	w.
Glenville	Gilmer	738	27	56.8	101	July 5	− 8	Jan. 5	33	52.22	7.52	Oct.	1.80	Feb.	20.8	115	193	89	83	w.
Grafton	Taylor	1,000	27	54.4	100	July 4	− 9	Jan. 5	27	40.78	5.35	Oct.	1.48	Feb.		103				e.
Lost Creek	Harrison	1,026	23	53.4	96	July 4	−13	Jan. 5	23	49.73	8.42	June	0.99	Sept.	25.0	108	187	53	125	w.
Mannington	Marion	974	18	53.0	93	July 4	−12	Jan. 5	18	55.96	7.75	July	1.81	Feb.	23.1	162	145	78	142	w.
Morgantown	Monongalia	1,250	28		97	July 4†			47		7.17	Oct.								
Moundsville	Marshall	642	18		100	July 3			18	43.32	7.35	Aug.	1.05	Jan.	11.6	97	163*	86	116	sw.
New Cumberland	Hancock	987	23	51.8	96	July 3†	− 4	Jan. 5	23	45.82	6.55	Oct.	1.57	Feb.	20.0	131				sw.
New Martinsville	Wetzel	634	27	55.8	100	July 4	− 2	Dec. 20	27	50.49	7.30	Aug.	1.40	Feb.	8.5	118	199	51	115	s.
Parkersburg	Wood	638	32	55.4	97	July 3	2	Dec. 20	32	39.58	5.37	Oct.	0.98	Sept.	13.3	136	108	90	167	se.
Parsons	Tucker	1,656	21	51.2	93	May 31†	−14	Jan. 5	21	39.38	6.98	Oct.	1.60	Mar.	19.5		163	93	109	
Philippi	Barbour	1,149	24																	
Pickens	Randolph	2,697	18		94	June 11	−11	Jan. 5	18		11.88	Oct.	1.92	Apr.						w.
Rowlesburg	Preston	1,375							34	56.23	7.89	Oct.	2.17	Apr.		143				w.
Saint Marys	Pleasants	577							12	50.58	7.01	Nov.	1.66	Feb.	11.5	128				sw.
Smithfield	Wetzel	835	15	50.9	94	July 4	−15	Dec. 20	15	51.51	7.53	Nov.	1.94	Feb.	26.0	153	227	71	67	sw.
Terra Alta	Preston	2,612	20	49.3	91	July 4†	−16	Jan. 5	20		7.21	Oct.	2.61	Apr.			157	80	128	w.
Wellsburg	Brooke	1,225	20	52.6	100	July 4	− 6	Dec. 20	29	44.74	6.58	July	1.31	Feb.						w.
Weston	Lewis	1,026	25	54.8	95	July 4	− 7	Jan. 5	32	50.99	8.00	June	1.15	Sept.	28.5	120	119	124	122	
Wheeling	Ohio	645	34	54.0	104	July 4	− 2	Jan. 6	36	44.81	7.10	Aug.	1.38	Feb.	16.8	148	154	85	126	sw.
Averages and extremes				53.5	104	July 4	−16	Jan. 5		48.23	11.88	Oct.	0.96	Sept.	21.1	128	168	74	123	w.
SOUTHERN DIVISION.																				
Bancroft	Putnam	574	16		92	June 19†	0	Jan. 4†	16	53.52	7.44	June	1.70	Feb.	13.3	110	253	7	105	nw.
Beckley	Raleigh	2,440	20		92	July 14			20		10.25	July								
Bluefield	Mercer	2,558	25	54.6	90	July 3†	− 2	Jan. 4†	25	46.65	7.65	July	1.06	Sept.	21.2	137				
Camden-on Gauley	Webster	2,062							3	82.72	13.08	July	2.74	Mar.	27.1	106				s.
Charleston	Kanawha	597	17	58.9	100	Aug. 7	1	Jan. 5	34	55.57	7.77	May	2.62	Sept.	11.0	104	153	10	202	w.
Clay	Clay	706	4						4	48.13	6.32	June	1.22	Feb.		102				
Cuba	Jackson	650	18	55.9	100	Oct. 2	−10	Dec. 20	18	41.11	6.68	Oct.	1.22	Feb.	9.2	111	135	159	71	w.
Dam 19 O. R.	Wood	557							3	46.34	7.44	Nov.	1.61	Feb.	10.9	126				
Dam 20 O. R.	Wood	551							2	42.95	5.90	May	1.55	Feb.		128				
Dam 22 O. R.	Jackson	538							4	41.31	5.93	Oct.	1.26	Feb.	10.9	102				
Dam 26 O. R.	Mason	505							3	45.31	7.82	May	0.81	Feb.		111				
Evans	Jackson	606	6	56.1	91	July 5	− 2	Dec. 20	6	49.92	6.80	May	1.66	Feb.	9.5	112				
Gary	McDowell	1,426							2	51.58	8.02	Oct.	2.35	Feb.						
Gassaway	Braxton								1											
Green Sulphur Springs	Summers	1,600	24						24											
Hinton	Summers	1,450	23	54.6	94	June 1†	0	Jan. 5	31	51.22	8.26	July	1.26	Sept.	8.0	143	144	14	207	s.
Holcomb	Nicholas	2,042	8		95	July 4	0	Jan. 10	8	58.47	8.63	June	2.34	Feb.	41.5	150	148	65	152	
Huntington	Cabell	538	24	56.1	100	July 14	6	Jan. 5†	25	50.93	6.70	Nov.	1.52	Feb.	11.0	126	168	27	170	w.
Kanawha Falls	Fayette	648							3	47.47	6.53	Oct.	0.68	Feb.	5.0	75				
Kayford	Kanawha	1,335							3	54.81	6.50	Oct.	1.62	Feb.	14.3	138				
Lewisburg	Greenbrier	2,200	20	52.4	92	July 4	−11	Jan. 5	20	48.30	7.59	July	2.17	Sept.	8.5	113	168	90	107	nw.
Marlinton	Pocahontas	2,131	21	47.7	88	July 3†	−14	Jan. 5	21	60.54	9.20	July	1.36	Sept.	23.0	132	58	198	109	sw.
Point Pleasant	Mason	553	27	56.7	98	July 3†	− 1	Dec. 20	27	48.24	6.88	Oct.	1.09	Feb.	6.0	131	136	70	159	
Powellton	Fayette	993					0	Jan. 5	25						10.0					
Raleigh	Raleigh	2,130							3	54.61	6.54	July	2.84	Apr.	19.1	126				
Renick	Greenbrier	1,653							4	50.85	9.66	July	1.58	Sept.		81				
Robertsburg	Putnam	574	20	55.3	97	Aug. 7	0	Dec. 20†	20	41.04	5.54	Nov.	1.20	Feb.	8.0	109				
Ryan	Ryan	700	17	54.5	94	Aug. 5	− 7	Jan. 5	17	53.29	7.20	June	1.90	Feb.	19.2	156	162	71	132	
Spencer	Roane	784	15	55.1	96	July 25†	− 4	Jan. 5	21	50.35	6.62	Oct.	1.74	Sept.	8.0	96	126	132	107	
Sutton	Braxton	839	13		101	July 14	− 8	Jan. 5	18		9.55	July	0.12	Sept.						
Union	Monroe	2,250	16	54.3	100	July 6	2	Jan. 6†	16	43.38	7.26	June	1.70	Sept.		65				
White Sulphur Springs	Greenbrier	1,940	10																	
Williamson	Mingo	660	20	56.7	93	July 4†	11	Jan. 11	20	49.41	5.82	Oct.	1.59	Feb.	7.4	126	168	92	105	w.
Averages and extremes				54.9	101	July 14	−14	Jan. 5		50.78	13.08	July	0.12	Sept.	13.9	116	152	78	135	w.
State averages and extremes				54.0	104	July 4	−16	Jan. 5		47.27	13.08	July	0.12	Sept.	16.8	118	164	78	123	w.

* 1 day interpolated from nearby stations.

† And other dates.

Monthly and Annual Mean Temperatures for the Year 1919, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September		October.		November		December.		Annual.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
PANHANDLE DIVISION																										
Bayard	.....	.....	27.5	+0.2	39.9[d]	−2.2	45.2	−1.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brandywine	34.2	.....	35.4	.....	44.6	.....	51.9	.....	60.2	.....	69.9	.....	72.4	.....	68.4	.....	64.0	.....	63.2	.....	43.8	.....	31.7	.....	53.3	.....
Burlington	33.2	+ 2.0	34.0	+3.6	42.2	+1.0	49.9	−0.9	59.5	−2.1	70.6	+2.2	72.8	0	69.0	−2.2	64.3	−0.4	59.0	+ 5.5	42.8	+0.5	26.8	−5.8	52.0	+0.3
Martinsburg	33.6	+ 2.7	34.8	+5.1	43.8	+4.0	51.4	−0.1	61.7	−1.6	73.8	+3.1	75.8	+0.2	71.3	−1.8	67.3	+0.8	58.9	+ 4.5	43.2	+0.3	28.2	−4.6	53.6	+1.0
Moorefield	36.3[a]	+ 4.0	37.6	+6.2	46.6[a]	+3.1	54.4	+2.3	64.3	+1.2	74.4	+5.2	76.8	+2.9	73.4[b]	+0.5	66.8[b]	0	64.0	+ 9.3	45.8[a]	+2.3	31.0	−2.3	56.0	+2.9
Piedmont	34.6	.....	34.4	.....	43.0	.....	50.4	.....	60.8	.....	72.2	.....	73.3	.....	69.3	.....	66.0	.....	60.2	.....	43.2	.....	27.6	.....	52.9	.....
Romney	36.4	+ 5.2	37.4	+5.9	45.1	+2.8	54.6[c]	+3.1	62.4	−0.2	73.0	+3.2	75.4	+0.2	72.2[d]	−0.6	67.3	+0.8	62.8	+ 8.0	44.6	+2.0	30.0	−2.3	55.1	+2.3
Upper Tract	34.6	+ 1.8	33.6	+1.5	44.6	+1.7	51.5	+0.2	60.4[a]	−1.5	70.8	+3.1	71.0[a]	+1.4	68.6	−2.4	64.7[b]	−1.4	63.3[b]	+ 7.7	44.0[b]	+0.4	30.2[b]	−3.7	53.1	+0.7
Wardensville	31.2[b]	.....	.....	.....	43.6[e]	.....	49.6[j]	.....	59.1[b]	.....	.....	.....	.....	.....	67.6[i]	.....	63.0[n]	.....	57.8[g]	.....	.....	.....	26.6[b]	.....	.....	.....
NORTHERN DIVISION																										
Bens Run	35.2	+ 2.4	36.0[a]	+4.7	45.9	+3.1	52.7	+0.4	63.0	−0.6	74.8	+4.6	76.6	+1.3	71.2	−2.5	68.1	0	64.2	+ 7.9	46.2	+3.0	31.2	−2.0	55.4	+1.9
Buckhannon	33.8	+ 1.4	34.6	+3.4	44.4	+3.1	51.8	+0.8	61.8	−0.4	72.3	+3.7	72.4	0	69.0	−1.1	63.6	−0.8	61.5	+ 8.4	43.7	+2.2	30.7	−2.2	53.3	+1.5
Creston	35.0[d]	+ 0.6	37.2	+5.0	46.6	+3.0	55.0	+2.1	63.6	0	74.6	+4.1	76.1	+1.3	71.8	−1.4	68.7	+1.2	64.0	+ 8.7	46.4	+2.7	31.5	−2.5	55.9	+2.1
Elkins	31.6	+ 2.6	31.9	+0.4	40.9	+1.8	48.4	−0.3	58.8	−0.3	69.0	+2.4	70.5	0	66.4	−2.0	62.0	+0.1	60.3	+ 8.9	41.4	+1.8	29.1	−3.4	50.9	+1.0
Fairmont	33.8	− 0.4	34.0	+1.5	43.6	+2.2	50.6	−1.6	62.0	−0.7	75.3	+5.3	76.2	+1.7	71.2	−1.6	67.1	−1.2	62.3	+ 7.2	43.1	+0.3	29.4	−3.3	54.0	+0.8
Glenville	36.1	+ 2.7	37.7	+5.5	47.4	+3.5	54.8	+1.7	64.8	+1.4	75.9	+5.4	77.8	+3.0	73.6	+0.1	69.2	+1.5	65.4	+10.0	46.4	+0.9	32.8	−2.2	56.8	+2.8
Grafton	34.2	+ 1.3	35.0	+3.6	44.6	+2.0	51.6[b]	0	62.6	+0.2	73.8	+4.5	75.1	+2.2	71.0	−0.5	67.3[c]	+0.5	63.2	+ 8.0	43.9	+1.1	30.7	−3.3	54.4	+1.6
Lost Creek	34.1	+ 0.6	35.0	+4.5	44.2	+1.7	50.6	+0.6	60.8	−0.2	71.5	+3.8	72.5	0	69.1	−1.5	65.0	−0.2	62.0	+ 7.6	44.1	+1.9	31.8	−1.6	53.4	+1.4
Mannington	33.8	+ 1.7	34.8	+4.3	44.0	+1.2	50.6	−0.8	60.8	−0.6	72.0	+3.9	72.6	0	68.2	−2.7	64.3	−1.1	61.0	+ 7.2	44.2	+3.1	29.2	−3.3	53.0	+1.1
Morgantown	.....	.....	.....	.....	.....	.....	.....	.....	62.4[o]	−0.3	74.8[a]	+5.9	75.6[o]	+2.0	70.9	−1.3	68.3[g]	+0.8	62.2[g]	+ 7.0	45.0	+1.6	27.7[d]	−6.3	.....	.....
Moundsville	.....	.....	.....	.....	.....	.....	.....	.....	62.6[a]	−0.7	74.8[a]	+5.1	75.8[a]	+1.3	70.4[a]	−2.3	67.0[a]	−0.8	62.3[a]	+ 6.4	42.0[a]	−1.3	30.0	−3.7	.....	.....
New Cumberland	32.6	+ 3.7	32.8	+5.5	40.9	−1.2	49.4	0	58.8	+2.1	72.0	+4.1	73.0	0	68.8[e]	−2.0	64.6	−0.9	60.2[a]	+ 6.0	42.2	+0.9	25.0	−5.0	51.8	+1.3
New Martinsville	36.6	+ 3.4	36.8	+4.8	46.8	+3.4	53.0	−0.2	63.5	−0.3	75.2	+3.8	76.9	+1.3	72.1	−2.0	68.6	−0.1	64.4	+ 7.6	45.4	+0.8	30.2	−4.7	55.8	+1.5
Parkersburg	35.6	+ 4.3	35.8	+1.8	44.6	+2.3	52.9	0	63.0	−0.3	76.0	+4.5	77.2	+1.7	72.4	−0.7	68.6	+2.4	63.4	+ 8.7	44.8	+1.7	30.4	−4.8	55.4	+1.8
Parsons	31.5	− 0.3	32.6	+3.3	41.6	0	48.4	−3.7	58.2	−1.2	68.4	+2.1	70.0	−0.4	67.2	−1.9	63.2	−0.1	60.4	+ 7.8	44.0	+2.8	29.2	−2.2	51.2	+0.5
Pickens	30.4	− 0.6	31.9[a]	+0.2	.....	48.9[a]	+0.4	58.5[a]	−0.5	69.1	+3.9	70.9[b]	+2.1	65.8	−1.1	62.1[b]	+0.3	60.0[a]	+ 7.8	41.2[a]	+0.6	29.6	−2.7	.....	.....	
Smithfield	30.4	− 1.6	29.9	−1.0	40.6	−1.1	47.9	−3.8	59.0	−2.5	71.2	+3.2	72.3	−0.1	67.2	−4.0	63.4	−1.2	58.9	+ 5.4	42.3	+1.2	27.2	−4.6	50.9	−0.8
Terra Alta	30.8	+ 2.2	30.0	+3.8	39.2	+0.4	46.2	0	56.4	−3.2	68.7	+2.5	69.6	0	65.0	−3.0	61.6	−1.5	57.8	+ 6.1	40.6	−1.5	25.8	−4.7	49.3	+0.1
Wellsburg	33.2	+ 3.4	33.0	+5.9	42.8	+3.6	50.9	+2.1	60.4	−0.5	73.3	+6.0	74.4	+2.5	70.5[i]	−0.5	64.4	−0.3	59.6	+ 6.1	41.8	+0.6	27.2	−3.5	52.6	+2.1
Weston	35.6	+ 1.6	36.4	+5.0	46.2	+2.7	53.1	+0.5	62.8	−0.4	73.2	+3.2	73.8	+0.1	71.4	−1.6	67.1	−0.3	64.2	+ 9.3	42.6	−0.7	30.1	−5.0	54.8	+1.2
Wheeling	34.2	+ 1.0	33.4	+2.6	43.6	+1.9	50.2	−2.5	61.6	−1.6	76.4	+5.9	77.2	+3.0	72.0	−1.2	68.0	+1.3	61.6	+ 6.7	43.2	+0.8	26.8	−6.8	54.0	+0.9
SOUTHERN DIVISION																										
Bancroft	.....	.....	39.2[k]	.....	46.8	+2.6	54.4	+0.8	62.6	−1.7	74.0	+2.9	74.6	+1.0	70.8[f]	−4.8	67.4	−1.9	63.4	+ 6.0	46.2	+1.2	32.7	−2.8	.....	.....
Beckley	.....	.....	.....	.....	.....	.....	.....	.....	61.8	+1.8	70.3	+3.1	73.0	+1.5	70.2	+0.6	62.1	−1.5	62.4	+ 8.0	.....	.....	.....	.....	.....	.....
Bluefield	36.7	+ 2.0	36.6	+3.5	45.6[a]	+2.0	52.4[a]	−1.2	62.0	−0.5	70.6[b]	+1.7	72.8	+0.9	67.8	−3.5	65.2	−1.0	63.8	+ 8.3	47.1	+2.6	35.2[a]	+0.2	54.6	+1.2
Charleston	38.8	− 0.2	39.6	+1.2	50.2	+2.5	58.0	+1.2	63.6	−2.7	77.8	+5.2	78.2	+1.7	74.7	−0.8	72.0	+1.8	67.2	+ 8.8	48.7	+0.6	37.7	−2.3	58.9	+1.4
Cuba	36.2	+ 2.1	37.4	+4.9	46.6	+2.6	54.7	+2.0	62.6	−0.6	73.6	+4.6	75.2	+1.7	71.7	−0.3	67.4	+0.6	65.6	+10.8	48.2	+4.6	32.0[a]	−1.9	55.9	+2.6
Evans	36.2	.....	38.9	.....	47.2[a]	.....	54.6	.....	62.9[a]	.....	74.4	.....	75.0	.....	73.1[c]	.....	67.6	.....	63.6	.....	46.4	.....	32.8	.....	56.1	.....
Green Sulphur Springs	.....	.....	34.6	+2.4	43.4	+0.5	50.3	−0.7	59.4	−2.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hinton	34.0[g]	− 1.0	34.4	+0.1	44.8	+0.7	51.7	−1.6	62.4	+1.9	73.4	+2.7	74.5	0	70.8	−3.2	67.2	−0.9	64.3	+ 7.8	46.6	+2.2	31.4	−4.2	54.6	+0.4
Holcomb	32.0	.....	32.4	.....	42.8	.....	49.2	.....	59.2	.....	69.4	.....	.....	.....	.....	.....	62.0	.....	.....	.....	43.7	.....	31.6	.....	.....	.....
Huntington	33.0	− 0.4	35.6	+3.4	44.8	+0.3	54.2	+0.2	64.6	−0.3	77.0	+4.5	79.2	+2.5	74.3	−0.3	70.1	+1.6	62.4	+ 6.3	45.7[m]	+2.0	32.0	−2.4	56.1	+1.4
Lewisburg	31.4	− 0.3	34.0	+2.1	44.0	+1.8	50.8	+0.7	60.4	−0.5	69.6	+2.1	71.7	+0.4	67.8	−2.2	63.2	−1.3	61.2	+ 7.9	44.1	+2.7	31.0	−1.5	52.4	+1.0
Marlinton	26.1	− 2.8	29.1	−0.2	39.0	−0.2	46.0	−1.4	56.2	−2.6	66.0	+0.7	67.5	−1.3	63.6	−4.1	59.0	−3.2	56.2	+ 5.8	37.4	−0.9	26.0	−3.8	47.7	−1.2
Point Pleasant	35.6	+ 1.4	38.1	+4.9	47.1	+1.1	55.6	+0.7	63.8	+1.7	76.0	+3.8	77.2	+0.6	74.0	+0.7	69.8	+0.1	64.8	+ 7.5	46.2	+1.0	32.7	−2.5	56.7	+1.8
Powellton	34.8	− 1.8	37.6	+2.3	46.6	+1.0	55.8	+1.5	63.8	−0.3	.....	.....	.....	.....	64.6[a]	−2.6	.....	.....	.....	.....	46.4[a]	+1.7	34.9	−1.2	.....	.....
Robertsburg	34.5[a]	0	35.8	+3.1	45.2	+0.5	53.2	+0.1	62.8	−1.5	75.8	+4.5	76.4	+0.7	72.2	−2.2	68.8	+0.3	64.0	+ 6.8	44.8	+1.4	30.4	−4.0	55.3	+0.8
Ryan	34.0	− 0.4	35.4	+2.3	44.6	+0.7	52.7	+0.1	61.4	−1.2	73.4	+4.6	75.2	+1.8	71.0	−1.0	67.1	+0.9	63.2	+ 8.8	45.1	+1.7	31.1	−3.0	54.5	+1.3
Spencer	35.2	+ 0.9	35.7	+2.8	45.6	+3.5	52.9[a]	+0.2	62.0[a]	−0.3	74.2	+5.1	76.7	+2.9	72.2	−1.1	67.6	+1.4	63.2[a]	+ 8.4	45.2	+1.9	30.6	−3.6	55.1	+1.9
Sutton	35.0	− 2.6	36.2	−2.1	46.2	+0.8	53.4	+0.2	63.4	−1.9	75.1	+2.2	73.2[g]	−3.6	.....	.....	64.6[j]	.....	.....	.....	.....	.....	30.2[c]	−2.5	.....	.....
Union	33.4	+ 0.1	36.6	+3.6	43.8	+1.0	51.4	+0.5	62.0	+1.1	70.9	+4.3	73.7	+2.7	70.0	−0.7	65.6	+0.5	63.2	+ 9.8	47.1	+6.8	33.4	+1.6	54.3	+2.6
Williamson	36.4	− 0.2	37.5	+1.4	45.9	−1.1	54.4	−0.9	63.2	−2.8	75.4	+3.2	77.1	+1.2	72.5	−2.6	68.6	−1.2	65.9	+ 7.5	47.6	+2.3	35.8	−1.4	56.7	+0.4

Reference letters indicate number of days missing: [a] one day, [b] two days, etc.

Monthly and Annual Precipitation for the Year 1919, with Departures from Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
PANHANDLE DIVISION.																										
Bayard			1.98	−1.54			1.03	−3.04																		
Brandywine	2.62		0.95		2.49		1.87		3.94		3.45		5.47		2.77		0.75		2.46		1.18		1.47		29.42	
Burlington	2.44	−0.14	1.77	−0.52	2.08	−1.02	1.70	−0.93	4.10	+0.30	2.38	−1.69	5.13	+1.52	3.45	−0.08	1.42	−1.43	3.81	+1.61	1.90	+0.16	3.05	+0.39	33.23	−1.83
Harpers Ferry	3.07	+0.24	1.47	−1.15	2.48	−0.63	2.94	+0.03	3.56	−0.16	3.75	−0.16	6.15	+2.82	2.06	−1.77	2.30	−0.54	3.07	+0.23	2.26	+0.02	1.17	−1.54	34.28	−2.61
Martinsburg	2.45	−0.06	1.86	−0.62	3.31	+0.06	1.85	−1.11	4.92	+1.17	7.25	+2.93	3.07	−0.88	3.30	−0.50	2.27	−0.54	3.76	+1.17	3.67	+1.54	2.21	−0.49	39.92	+2.67
Moorefield	1.65	−0.93	1.14	−1.36	2.41	−0.26	1.85	−0.96	3.49	−0.13	3.30	−1.01	3.54	+0.07	1.93	−1.22	1.41	−1.23	3.01	+0.81	1.44	−0.18	1.94	−0.34	27.11	−6.74
Piedmont	1.76		1.71		2.39		1.81		4.11		4.15		6.38		2.96		1.33		4.59		1.98		2.36		35.53	
Romney	1.77	−0.96	1.40	−0.87	3.68	+0.59	2.00	−0.65	5.02	+1.36	4.07	+0.21	5.03	+1.51	3.73	−0.15	1.91	−0.58	4.30	+1.91	3.13	+1.17	2.63	+0.13	38.67	+3.67
Upper Tract	1.60	−1.01	0.35	−1.37	2.25	−0.20	1.70	−0.64	3.43	+0.13	3.90	−0.55	4.50	+0.80	0.95	−3.07	1.20	−1.18	2.90	+0.62	0.85	−0.79	1.31	−0.97	24.94	−8.23
Wardensville	2.31		1.32		2.60		1.56		4.85						4.55		3.08		3.31				2.17			
NORTHERN DIVISION.																										
Bens Run	3.14	−1.33	1.56	−1.76	2.58	−1.68	3.04	−0.96	5.58	+1.13	2.22	−2.54	5.88	+1.27	8.05	+4.28	1.52	−0.87	6.70	+4.54	5.98	+3.41	4.92	+1.00	51.17	+6.49
Brandonville	4.55		2.89		2.43		3.09		5.54		3.12		5.08		5.04											
Buckhannon	4.45	−0.03	2.10	−1.74	3.25	−1.24	2.62	−1.73	6.00	+1.62	5.20	+0.27	5.76	+0.46	5.80	+1.84	2.51	−0.63	6.74	+3.50	4.95	+1.58	5.00	+0.91	54.38	+4.81
Cortland	4.79		1.56				1.45		4.74		6.18		6.94		3.98		0.96		5.18		2.50					
Creston	4.37	+0.60	1.61	−1.28	3.09	−0.77	2.35	−1.60	5.79	+2.23	5.82	+1.44	4.93	+1.13	4.90	+1.76	1.24	−1.46	7.40	+4.71	5.81	+3.36	4.31	+1.04	51.62	+11.16
Davis	4.03		2.77		2.04		2.50		4.85				5.85						7.30							
Elizabeth	3.81		1.16		2.91		2.29		5.06		3.75		4.70		3.84		1.33		6.72		5.92		3.22		44.71	
Elkins	4.20	+0.86	2.01	−1.13	2.76	−1.31	1.94	−1.35	3.88	−0.10	6.40	+1.36	8.75	+4.11	3.09	−0.56	2.28	−0.59	5.69	+3.27	3.25	+0.39	4.73	+1.31	49.01	+6.26
Fairmont	4.01	+0.11	1.67	−1.34	2.84	−1.14	1.90	−1.61	4.08	+0.06	5.31	+0.72	4.55	−0.28	3.64	+0.17	2.75	+0.15	5.86	+3.27	5.51	+2.81	3.75	+0.29	45.90	+3.21
Glenville	4.62	+0.32	1.80	−1.99	2.74	−1.41	1.81	−1.92	4.93	+0.98	6.98	+2.63	4.08	−1.39	5.22	+1.30	2.81	−0.54	7.52	+4.62	4.75	+1.76	4.96	+1.22	52.22	+5.58
Grafton	3.34	−0.72	1.48	−1.87	1.86	−2.21	2.46	−1.28	3.75	−0.61	3.95	−0.73	2.47	−2.46	5.24	+1.24	1.58	−1.38	5.35	+2.55	5.04	+1.95	4.26	+0.63	40.78	−4.89
Lost Creek	4.14	+0.08	1.56	−1.38	2.53	−1.58	2.06	−1.37	5.11	+1.00	8.42	+4.49	6.45	+1.73	3.51	−0.60	0.99	−1.84	6.16	+3.64	4.20	+1.86	4.60	+1.07	49.73	+7.10
Mannington	4.31	−0.45	1.84	−0.83	3.06	−0.74	2.39	−1.65	4.85	+0.83	7.00	+2.98	7.75	+3.10	4.82	+1.36	3.24	−0.11	6.51	+3.84	5.91	+3.48	4.31	+0.92	55.96	+12.73
Morgantown									3.77	−0.18	5.59	+0.99	4.81	−0.34	6.28	+2.28	3.38	+0.27	7.17	+4.07	5.65	+2.76	3.45	+0.23		
Moundsville	1.05	−2.18	2.30	+0.07	2.59	−0.98	2.97	−0.14	4.18	+1.12	1.67	−1.85	4.82	+0.30	7.35	+4.47	2.30	−0.25	5.99	+3.15	4.77	+3.07	3.42	+0.37	43.32	+7.15
New Cumberland	2.03	−0.72	1.57	−0.95	3.19	−0.22	2.67	−0.86	5.22	+2.06	3.55	−1.12	5.70	+1.21	6.52	+3.28	2.22	−0.24	6.55	+3.83	3.91	+2.10	2.69	+0.13	45.82	+8.50
New Martinsville	3.22	−0.55	1.40	−1.64	2.90	−0.85	2.18	−1.37	5.41	+1.80	4.10	+0.11	4.28	−0.35	7.30	+4.00	2.00	−0.71	7.10	+4.51	6.55	+3.94	4.05	+0.43	50.49	+9.34
Parkersburg	2.48	−0.71	1.76	−1.48	2.37	−1.45	2.09	−0.82	5.00	+1.54	2.80	−1.85	3.30	−1.36	4.60	+1.04	0.98	−1.74	5.37	+2.93	4.76	+1.93	4.07	+1.30	39.58	−0.64
Parsons	2.13	−2.69	1.79	−1.66	1.60	−2.62	2.20	−1.70	2.75	−1.15	2.90	−2.92	5.10	−0.10	3.55	−0.23	2.47	−0.85	6.98	+4.24	4.12	+1.60	3.73	+0.01	39.38	−8.07
Pickens	6.66	+0.10	1.96	−3.06			1.92	−3.16	7.47	+2.47	8.27	+2.14	8.09	+1.82	8.40	+3.43	3.09	−0.90	11.88	+8.10	6.54	+2.73	7.35	+2.32		
Rowlesburg	5.51	+0.93	2.80	−0.58	3.66	−0.59	2.17	−1.85	4.47	+0.19	5.90	+0.99	5.94	+1.14	3.62	−0.14	4.37	−1.42	7.89	+5.06	5.03	+2.01	4.87	+1.20	56.23	+6.94
St. Marys	3.41	−1.39	1.66	−1.74	2.93	−0.80	3.16	−0.43	6.07	+2.36	3.20	−0.44	4.88	+0.92	6.10	+1.27	2.24	−1.22	5.02	+1.56	7.01	+4.95	4.90	+1.40	50.58	+6.44
Smithfield	3.03	−2.40	1.94	−1.69	2.65	−1.52	2.36	−1.46	6.59	+2.64	3.73	−0.89	5.55	+0.18	6.07	+1.83	2.14	−1.35	5.78	+2.43	7.53	+4.74	4.14	+0.08	51.51	+2.59
Terra Alta	4.29	−1.52	2.76	−1.31	3.30	−1.88	2.61	−1.36	5.47	+0.43	3.98	−3.83	4.83	−0.91	5.31	+0.45	2.73	−1.00	7.21	+3.83	3.51	−0.05				
Wellsburg	1.71	−1.84	1.31	−1.76	3.15	−0.20	2.30	−0.80	4.56	+1.10	3.64	−0.82	6.58	+2.00	6.16	+2.60	2.06	−0.79	6.16	+3.40	4.06	+1.95	3.05	−0.16	44.74	+4.68
Weston	4.29	+0.02	1.93	−1.88	2.80	−1.63	2.25	−1.82	3.60	−0.65	8.00	+3.60	4.80	−0.28	5.25	+1.35	1.15	−1.86	7.20	+4.41	4.42	+1.12	5.39	+1.68	50.99	+4.06
Wheeling	2.01	−1.11	1.38	−1.21	3.25	+0.17	1.78	−1.35	4.52	+1.06	2.77	−1.12	6.17	+1.59	7.10	+3.64	1.65	−0.94	5.69	+3.27	5.10	+2.65	3.39	+0.46	44.81	+7.07
SOUTHERN DIVISION.																										
Bancroft	4.70	+0.49	1.70	−1.34	2.88	−0.99	3.29	−0.63	6.38	+2.37	7.44	+2.83	2.85	−1.50	4.86	+0.26	3.03	+0.17	6.75	+3.36	5.03	+2.51	4.70	+1.57	53.52	+9.10
Beckley									6.98	+3.78	5.92	+1.58	10.25	+6.10	1.97	−1.12	1.00	−1.69	6.57	+4.18						
Bluefield	5.02	+2.02	2.75	−0.38	3.01	−0.74	3.24	−0.17	4.65	+0.92	4.29	−0.39	7.65	+3.16	3.86	−0.49	1.06	−1.66	6.49	+3.81	2.00	−0.45	2.63	−0.32	46.65	+5.31
Camden-on-Gauley	5.01		3.82		2.74		4.21		10.71		10.15		13.08		8.67		4.00		8.71		5.72		5.90		82.72	
Charleston	5.35	+1.61	3.00	+0.57	3.52	−0.60	3.07	−0.54	7.77	+3.86	3.92	−0.60	3.93	−0.20	6.26	+1.94	2.62	−0.33	6.25	+3.59	5.45	+2.54	4.43	+1.14	55.57	+12.98
Clay	3.19		1.22		1.95		2.80		4.55		6.32		5.06		5.06		3.45		5.42		4.22		4.89		48.13	
Cuba	3.02	−0.71	1.22	−1.83	3.24	−0.34	2.27	−0.97	3.70	+0.31	3.76	−0.19	3.90	−0.23	2.22	−0.81	1.49	−0.91	6.68	+3.84	4.63	+2.43	4.98	+1.76	41.11	+2.35
Dam 19 O. R	5.52		1.61		2.94		1.81		5.80		2.94		2.89		5.61		1.92		4.85		7.44		5.01		46.34	
Dam 20 O. R	3.42		1.55		3.07		2.06		5.90		2.85		1.96		4.28		1.44		5.27		5.75		5.40		42.95	
Dam 22 O. R	3.93		1.26		2.04		2.02		4.84		3.36		3.02		3.99		1.64		5.93		4.84		4.97		41.31	
Dam 26 O. R	4.11		0.81		2.49		2.98		7.82		4.23		3.34		2.88		1.66		5.96		4.63		4.40		45.31	
Evans	3.61		1.66		4.22		2.92		6.80		3.75		5.91		2.48		2.14		5.82		5.72		4.89		49.92	
Gary	3.80		2.35		3.58		2.85		4.35		6.13		6.92		3.82		3.13		8.02		3.20		3.45		51.58	
Gassaway													4.48		3.87		1.01		3.15		2.99					
Green Sulphur Springs			3.93	+1.37	4.81	+1.19	2.33	−0.89	6.35	+2.94																
Hinton	1.22	+1.18	2.46	−0.64	2.80	−1.11	2.32	−1.44	5.00	+1.21	8.04	+3.93	8.26	+4.55	4.64	+0.88	1.26	−1.16	5.20	+2.80	3.44	+1.29	3.58	+0.75	51.22	+11.91
Holcomb	4.59		2.34		3.38		3.10		5.09		8.63		5.71		5.97		3.80		7.02		3.40		5.53		58.47	
Huntington	4.25	+0.57	1.52	−1.59	2.90	−1.38	2.70	−0.97	6.40	+2.45	5.90	+1.63	4.22	−0.15	2.88	−0.89	3.24	+0.89	4.94	+2.57	6.70	+4.00	5.28	+2.10	50.93	+9.23
Kanawha Falls	4.84		0.68		1.69		2.17		5.84		5.09		4.89		5.61		1.90		6.53		4.09		4.14		47.47	
Kayford	5.11		1.62		3.14		3.04		5.94		5.08		5.36		5.64		1.81		6.59		6.13		5.44		54.81	
Lewisburg	4.87	+1.59	2.35	−0.56	3.12	−0.86	2.51	−0.67	5.02	+1.29	5.44	−1.32	7.59	+3.76	3.30	−0.20	2.17	−0.58	4.99	+2.35	3.74	+1.47	3.20	+0.42	48.30	+9.33
Marlinton	5.84	+2.08	3.41	−0.02	4.69	+0.81	3.11	0	6.71	+2.84	7.01	+2.20	9.20	+4.11	4.58	+0.17	1.36	−1.84	4.43	+1.57	4.99	+2.25	5.21	+2.05	60.54	+16.22
Point Pleasant	4.78	+0.99	1.09	−2.50	2.77	−1.33	2.34	−0.94	5.10	+1.33	4.21	−0.16	5.74	+1.72	2.63	−0.63	2.10	−0.18	6.88	+4.38	5.48	+2.68	5.12	+1.90	48.24	7.26
Powellton	4.23	−0.41	1.42	−1.55	2.88	−1.66	3.31	−0.39	5.37	+1.48							1.33	−1.54	6.69	+4.57	5.98	+3.35	4.85	+2.01		
Raleigh	4.05		3.34		3.63		2.84		5.69		6.06		6.54		4.30		3.80		5.13		4.44		4.79		54.61	
Renick	6.00		2.96		3.12		2.62		5.50		5.13		9.66		3.93		1.58		4.80		1.87		3.68		50.85	
Robertsburg	4.22	+0.34	1.20	−2.01	2.70	−1.31	2.77	−1.01	4.92	+1.36	4.59	+0.87	3.03	−0.84	2.70	−0.67	2.32	−0.08	5.36	+2.71	5.54	+3.19	4.69	+1.08	44.04	+3.63
Ryan	4.58	+0.44	1.90	−1.55	2.88	−1.28	2.99	−0.83	5.20	+1.70	7.20	+2.83	5.02	+0.22	4.24	+0.30	3.00	+0.12	6.86	+3.72	4.96	+2.47	4.46	+1.02	53.29	+9.16
Spencer	5.99	−0.30	2.03	−1.10	3.15	−0.53	1.99	−1.60	5.18	+1.60	5.31	+0.80	6.43	+1.98	3.63	+0.22	1.74	−1.44	6.62	+3.79	5.49	+3.08	4.79	+3.70	50.35	+10.11
Sutton	4.52	−0.44	2.09	−1.37	3.11	−0.60	2.81	−1.48	4.82	+0.63	7.67	+1.88	9.55	+4.67			0.12	−3.21	2.13	−1.00			3.13	−0.50		
Union	2.92	−0.74	3.10	+0.53	2.75	−0.76	2.20	−0.80	5.59	+2.97	7.26	+3.16	5.35	+0.82	2.66	−1.19	1.70	−1.11	5.15	+2.44	2.10	+0.08	2.60	+0.17	43.38	+5.57
Williamson	5.01	+1.01	1.59	−1.63	4.29	−0.01	2.64	−1.34	5.51	+1.70	2.85	−1.99	3.28	−1.32	5.17	+1.19	2.81	−0.14	5.82	+3.29	4.98	+2.31	5.46	+1.52	49.41	+4.60

Monthly Maximum Temperatures for the Year 1919, with Dates.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
PANHANDLE DIVISION.																								
Bayard	.....	.....	63	28	69[d]	17†	79	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brandywine	64	21	61	28	72	26	82	9	92	31	91	2	95	5	90	8	90	7†	91	2	79	1	62	9
Burlington	57	26†	63	28	74	26	81	7	89	30	90	14†	97	5	89	5	92	10	87	3	69	12	60	7
Martinsburg	56	27†	59	28	73	17	82	9	93	30†	94	3†	100	4†	93	24	93	8	90	3	66	1	62	7
Moorefield	64[a]	30	69	28	79[a]	26	88	9	97	31	96	1	102	4†	100[b]	5	98[b]	6†	102	2	74[a]	1	67	12
Piedmont	56	2	65	28	73	26	83	8	94	31	94	1	98	4	90	5†	92	9	89	1	68	12	59	12
Romney	60	28	68	28	76	26	87[c]	9	98	31	96	20	102	4	94[d]	6†	97	9	93	3	74	12	64	7
Upper Tract	67	21	56	4	75	26	85	9	94[a]	31	91	1	97[a]	4†	92	5†	92[c]	6†	92[b]	2†	78[b]	1	65[b]	14
Wardensville	62[b]	1†	.....	.....	75[c]	26	79[j]	8	91[b]	30	.....	.....	.....	.....	.....	.....	92[a]	4	91[b]	6	90[g]	2	.....	.....	65[b]	12
NORTHERN DIVISION.																								
Bens Run	65	22	67	28	76	16†	86	9	95	31	93	1	97	3†	92	7	91	6†	91	2†	69	9†	65	13
Buckhannon	63	1	65	28	75	26	82	9	90	31	91	3†	93	4	87	7†	86	9†	84	2	66	1†	72	9
Creston	60	22	64	22	75	16†	89	9	94	31	95	1†	100	4	96	7	94	9†	92	2†	66	8	67	9
Elkins	61	1	62	28	72	26	80	9	92	31	89	1	91	4	88	16	86	9	85	2	65	9	68	9
Fairmont	63	20†	70	28	76	16†	87	9	100	31	100	3	101	4†	94	5†	93	7	91	2	72	9	68	9
Glenville	69	22	70	28	80	25†	89	9†	99	31	98	1†	101	5	96	7	95	7†	95	3†	75	1	71	12
Grafton	62	1	62	28	77	25	88[b]	9	98	31	96	3	100	4	95	7	93[c]	9†	93	2	67	29†	70	9
Lost Creek	67	1	68	28	75	26	82	9†	93	31	92	3	96	4	89	7†	93	7†	91	3	68	11	68	9
Mannington	63	22	67	28	74	26	81	9†	91	31	91	1	93	4	88	5†	88	9	86	2	67	9†	66	9
Morgantown	.....	.....	.....	.....	.....	.....	.....	.....	94[b]	31	93[a]	1†	97[b]	4†	91	16	90[f]	8	88[b]	2†	69	30	63[d]	13
Moundsville	.....	.....	.....	.....	.....	.....	.....	.....	97[a]	30	97[a]	3	100[a]	3	95[a]	6	93[a]	8	90[a]	1†	68[a]	8†	65	11
New Cumberland	62	22	64	28	72	17	81	9	94	31	94	1	96	3†	90[e]	7	89	7†	89[a]	3	65	1†	60	13
New Martinsville	64	22	68	28	77	16†	86	9	97	31	96	1	100	4	93	7	94	9	92	2	70	9	63	13
Parkersburg	63	22	66	28	76	16	84	9	93	31	93	14	97	3	94	7	94	9	91	2	65	9	65	13
Parsons	64	20	67	28	76	26	84	9	93	31	90	4	93	4†	90	16	87	7†	87	3	68	10	69	9
Pickens	60	21	61[a]	28	.....	.....	83[a]	9	92[a]	31	94	11	92[b]	4	89	7	87[b]	9	89[a]	2	65[a]	9	64	9
Smithfield	60	22	52	28	75	25	83	9	93	31	92	18	94	4	88	7	90	9	86	3	65	9	65	9
Terra Alta	58	21	61	28	70	25†	78	9	93	31	88	1	91	4†	85	16	84	7†	82	2	64	10	64	9
Wellsburg	60	1	65	28	75	17	81	9	96	30†	96	1	100	4	92[c]	5†	89	7†	87	2	65	10†	62	13
Weston	65	21	67	28	79	26	85	9	93	31	92	1†	95	4	90	5†	91	10	91	3	69	9	70	8
Wheeling	64	20†	66	28	78	25	86	9	95	29†	100	1	104	4	97	5	97	9	95	2†	70	9	64	12
SOUTHERN DIVISION.																								
Bancroft	.....	.....	68[k]	28	79	16	87	9	90	30†	92	19	92	3†	92[f]	7	92[c]	10	90	2	73	2	70	9†
Beckley	.....	.....	.....	.....	.....	.....	.....	.....	88	27	88	1	92	14	87	4†	89	6	88	2	.....	.....	.....	.....
Bluefield	64	2†	61	28	74[a]	25	81[a]	9	85	31	88[b]	2	90	3†	87	1†	87	10	87	2	72	1	64[a]	9†
Charleston	65	22	72	28	80	16	90	9	94	30	98	19	98	4†	100	7	96	10†	95	2	80	1	72	9
Cuba	67	22	69	28	81	25	90	9†	92	31	93	1	95	4	96	5	89	4	100	2	76	12	71[a]	9
Evans	60	1	62	22†	74[a]	16	82	9	86[a]	30	90	10	91	5	90[c]	7	90	10	87	2	65	18	64	9
Green Sulphur Springs	.....	.....	58	24	69	26	80	9	86	5†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hinton	60[a]	1	60	28	72	25	83	9†	91	30†	94	1	94	4†	91	5†	93	10	92	2	72	6	70	9
Holcomb	62	21†	62	28	75	25	85	9	91	30†	90	1†	95	4	89	7	89	10	87	2	70	1	66	9
Huntington	60	1	66	22	77	25	88	9	98	31	98	1†	100	14	97	7	96	10	92	2	65[m]	1	66	9
Lewisburg	59	21	57	14†	73	25	83	9	87	31	88	1	92	4	88	5†	88	10	87	2	71	1	63	9†
Marlinton	54	21	52	14†	70	25	76	9	84	30†	84	19	88	3	88	5	82	8	82	2	68	3	58	9
Point Pleasant	67	21	68	22	80	25	88	7†	93	31	96	1	98	3†	96	7	96	8	94	2†	69	1	67	9†
Powellton	60	1†	61	28	72	27	86	10	95	31	.....	.....	.....	.....	.....	.....	87[a]	10	.....	.....	74[e]	1	71	9
Robertsburg	67[a]	21	68	28	80	25	90	9	95	30†	96	1†	96	3	97	7	93	6†	94	2	70	29	65	12
Ryan	64	22	67	28	77	25	87	9	92	31	91	1†	93	4†	94	5	92	9†	91	2	71	1	68	12
Spencer	65	21†	67	28	77	16†	88[a]	9	91[a]	30	92	1†	96	25†	96	6	94	9†	90[a]	2†	66	9	66	9
Sutton	66	23†	64	27†	75	17†	88	9†	93	30†	97	11†	101[g]	14	.....	.....	91[d]	21	.....	.....	.....	.....	61[e]	9†
Union	62	2	64	3	69	4	87	9	90	30†	92	2	100	6	89	1†	90	8†	90	2	78	1	66	9
Williamson	67	1	68	22	79	25	85	9	89	5†	92	10†	93	4†	92	7	90	10	87	2	70	9†	72	9

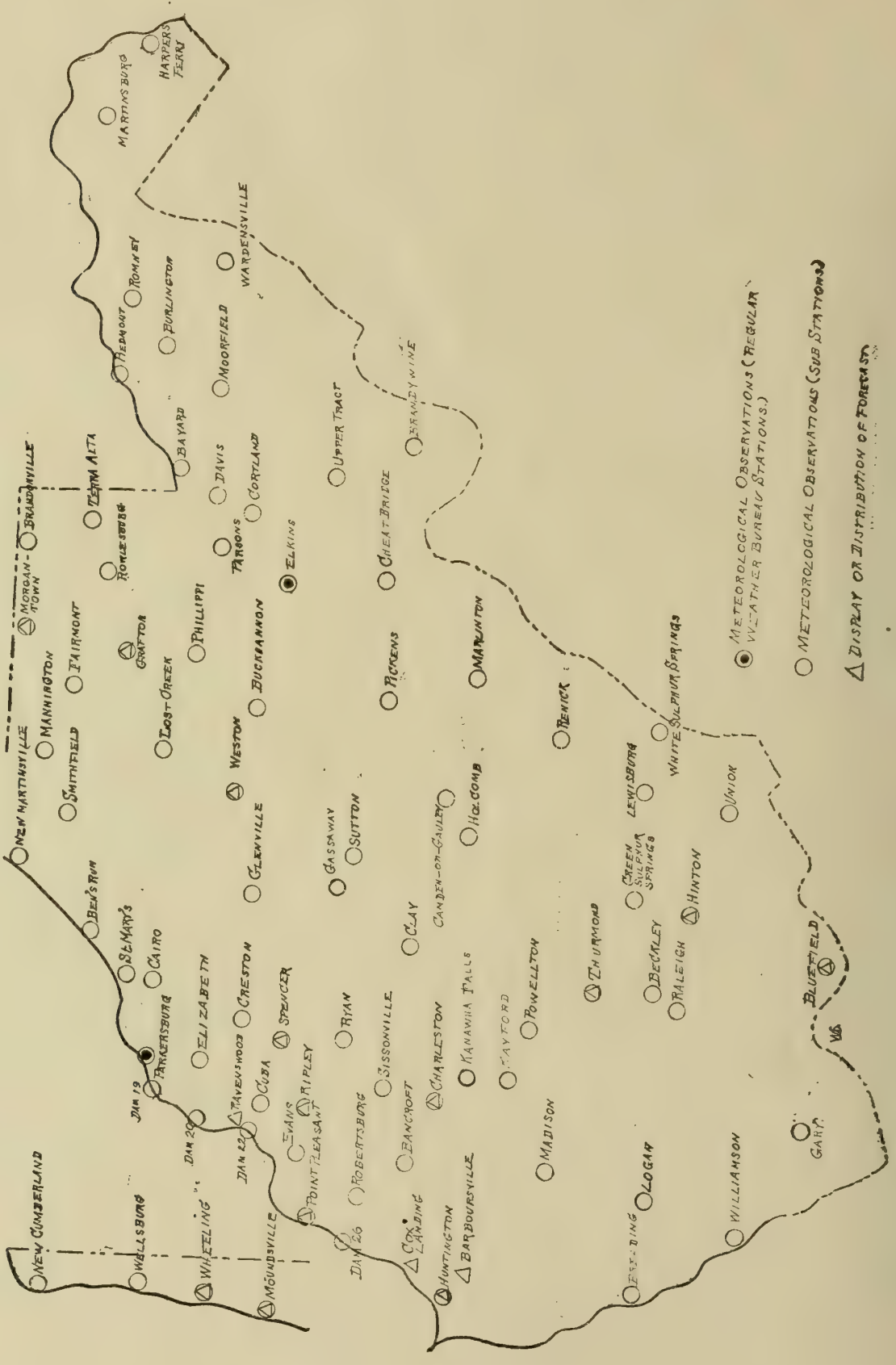
Reference letters indicate number of days missing; [a] one day, [b] two days, etc.
† Also other dates.

Monthly Minimum Temperatures for the Year 1919, with Dates.

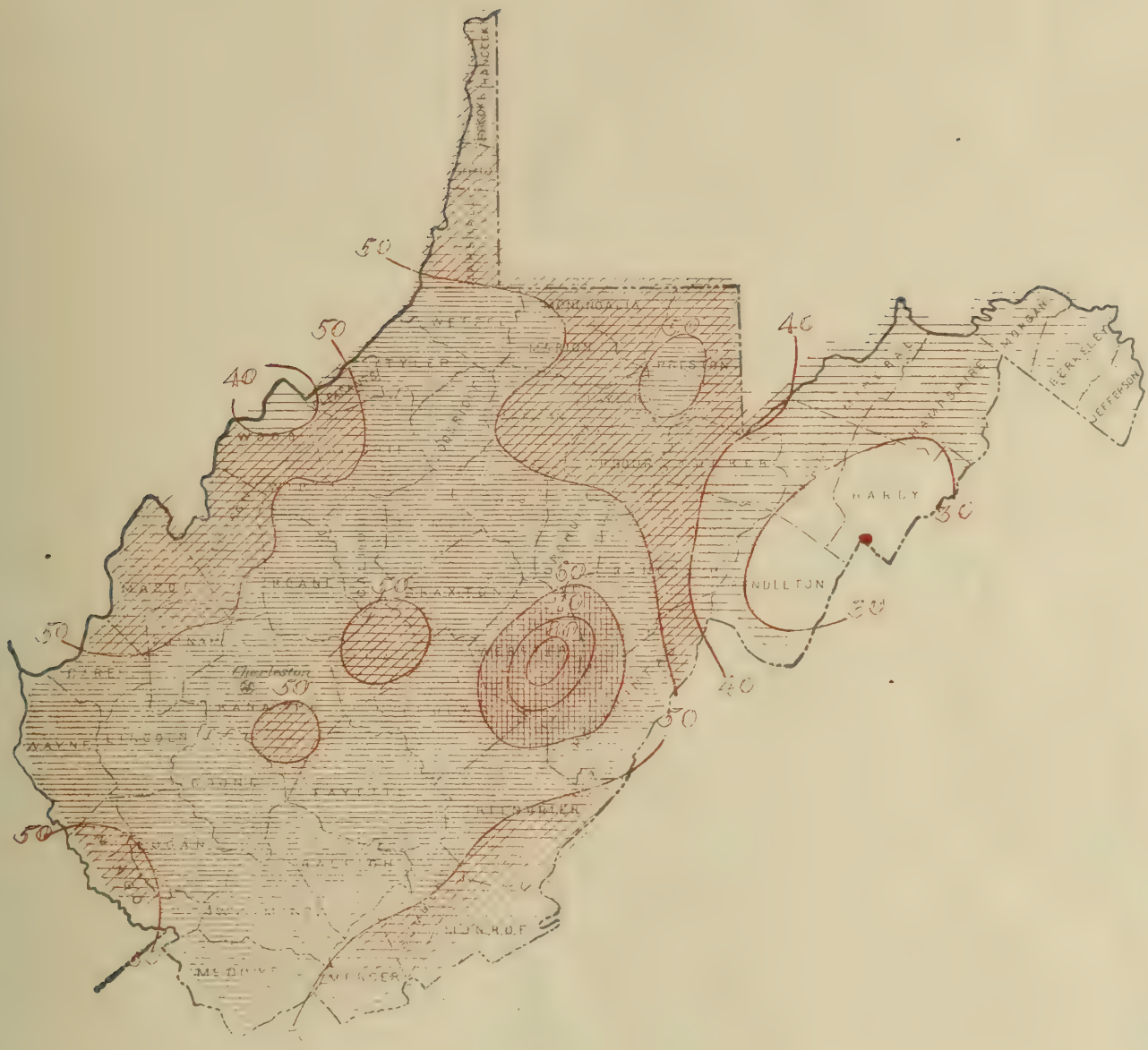
Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date	Minimum.	Date.	Minimum.	Date.	Minimum	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
PANHANDLE DIVISION																								
Bayard	.....	.....	-- 2	20	12[d]	23	16	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Braudywine	-10	5	6	11	20	2†	14	2	34	3†	42	30	43	1	40	29	31	29	29	19	15	14	- 5	20
Burlington	-10	5	10	11	22	2†	22	2	35	3	43	30	43	12	45	28†	35	28†	32	19†	19	25	- 4	20†
Martinsburg	-- 3	5	19	11	27	2†	22	2	40	1	50	30	53	1	51	28†	42	27†	36	13	25	16†	5	21†
Moorefield	-10[a]	5	10	11	21[a]	12	18	2	37	3†	46	30	47	1	46[b]	29	37[b]	27†	33	19	19[a]	14†	- 7	20
Piedmont	- 4	5	11	11	20	1	19	2	37	3	46	29†	41	12	46	27	38	28	35	19†	22	25	0	18
Romney	-10	5	10	11	21	3	.....	.....	36	19	45	30	46	1	45[d]	29	36	27†	32	19	19	14†	- 5	20
Upper Tract	-11	5	11	11	20	2†	16	1	34[a]	18†	48	24	42[a]	1†	42	29	34[b]	13	32[b]	19†	16[b]	19†	- 4[c]	20
Wardensville	- 8[a]	5	.....	.....	23[d]	12†	20[l]	2	35[h]	19	.....	.....	.....	.....	43	26†	34[a]	27	29[e]	18	.....	.....	- 5[b]	19†
NORTHERN DIVISION																								
Bens Run	1	5	17[a]	2†	24	2†	19	2	40	19	53	29	54	12	50	28	46	27	39	13	22	14†	3	20
Buckhannon	- 9	5	12	9†	22	29	15	2	37	20	47	29	50	12†	45	29	39	27†	36	18†	19	14†	0	18
Creston	0[d]	5	14	6	23	2†	16	2	37	19	48	29	51	12	48	28	40	27	35	19	17	14	- 4	20
Elkins	-14	5	5	11	20	23	16	2	34	19	45	29	46	12	45	29	35	29	34	19	17	14	- 6	17
Fairmont	- 3	5	11	11	22	12	16	2	37	3	49	29†	52	1	49	29	41	27	38	13†	19	14	2	18
Glenville	- 8	5	11	2	18	29	13	2	35	3	46	29	52	12	47	26	38	26	39	19†	11	14	0	21
Grafton	- 9	5	7	11	20	2	14[b]	2	36	19	46	29	49	12	48	10†	36[c]	29	35	13	17	14†	- 2	18
Lost Creek	-13	5	9	11	19	12†	12	2	34	3†	45	29	48	12	46	29	36	27†	33	13	15	14	- 3	18
Mannington	-12	5	9	11	20	12	14	2	35	19	47	29	49	1†	46	28	38	27†	34	13	17	14	- 8	20
Morgantown	.....	.....	.....	.....	.....	.....	.....	.....	41[a]	1†	54	28†	53[a]	11†	49	9†	42[c]	13	32[c]	13	19	14†	0[d]	18†
Moundsville	.....	.....	.....	.....	.....	.....	.....	.....	34	19	47	28	51	11	47	27†	41	26	36	12	20	13	- 2	19
New Cumberland	- 4	5	8	11	16	8	16	2	35	13†	43	29	49	1†	46[e]	9†	37	26†	29[a]	13	16	14	- 3	18†
New Martinsville	- 1	5	14	11	23	6†	15	2	40	3†	51	29	54	12	49	28	44	27	36	13	20	14†	- 2	20
Parkersburg	5	4	18	6	23	6	21	2	43	13	57	29	56	12	50	28	45	14	39	13	22	14	2	20
Parsons	-14	5	- 2	11	17	12	8	2	31	3	41	30	43	1	43	27	32	29	34	19†	15	20	- 9	18
Pickens	-11	5	2[a]	11	.....	.....	14[a]	1	34[a]	13†	42	29	45[b]	1	42	29	27[b]	30	32[a]	18	14[a]	20	- 2	18
Smithfield	- 4	5	9	11	18	29	13	2	34	3	42	30	49	12	47	28	39	27	34	13	17	14†	-15	20
Terra Alta	-16	5	0	9	15	6	10	2	34	3	44	29	47	12	44	3	38	13†	32	13	14	14	- 7	18
Wellsburg	- 5	5	8	11	19	2	16	2	35	3†	43	29	47	1	46[i]	10	37	27	32	13	16	14	- 6	20
Weston	- 7	5	11	11	22	29	15	2	38	3†	49	29	50	1	49	29	41	15†	38	13†	19	13†	2	17
Wheeling	- 2	6	11	10	21	6	11	2†	38	13	52	23†	53	11†	47	28†	43	26†	39	13†	20	14	0	18†
SOUTHERN DIVISION																								
Bancroft	0	4†	15	7	22	29	20	1†	39	12†	52	30	53	1	50	4†	42	27	40	18†	19	20	6	20
Beckley	.....	.....	.....	.....	.....	.....	.....	.....	38	11	51	29	48	1†	46	28	37	29	35	19	.....	.....	.....	.....
Bluefield	- 2	4†	13	11	24[a]	12†	18[a]	1	40	3†	51[b]	30	50	10	46	13	42	13†	36	20	19	14†	9[a]	15
Charleston	1	5	10	10	25	2†	23	1†	40	4†	54	29	55	12	52	30	45	29	41	19	21	20†	5	15
Cuba	- 3	5	13	6	21	2†	15	2	38	18†	50	29†	52	12	46	29	40	27	34	13	16	20	-10	20
Evans	4	5	18	6	26[a]	29	22	2	37[a]	8	51	7	56	1	52[e]	26	42	27	41	13†	22	14†	- 2	20
Green Sulphur Springs	.....	.....	10	8	19	12	20	1†	35	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hinton	0	5	17	21	23	12	22	1†	10	3†	51	30	50	1	51	27†	43	29†	40	19†	21	14†	13	15†
Holcomb	0	10	8	11	20	12†	12	2	33	19	43	30	.....	.....	.....	.....	36	29	.....	.....	15	20	3	15
Huntington	6	5†	20	6†	26	2	25	2	41	12	57	29	58	1†	52	29	45	27†	41	19	21	16†	12	21
Lewisburg	-11	5	12	2	20	12	18	1†	36	3	47	30	47	1	43	27	34	29	31	19	17	14	5	20
Marlinton	-14	5	6	21	16	12	16	1†	30	19	40	30	44	1	42	26†	33	29	28	19	10	14†	8	20
Point Pleasant	3	5	16	6†	22	2	19	2	40	12†	52	30	53	1†	49	10†	40	27	38	13†	19	20	- 1	20
Powellton	0	5	18	2	26	2†	24	1†	39	19	.....	.....	.....	.....	.....	.....	43[a]	27	40	19	22[c]	14†	12	24
Robertsburg	3[a]	5	13	9	24	21	20	2	40	3†	53	30	53	12	49	26†	41	27	39	19	18	20	0	20†
Ryan	- 7	5	11	6	17	3	14	2	36	19	49	30	50	12	47	29	33	27	32	20	15	14†	- 5	20
Spencer	- 4	5	15	2†	23	2†	16	2	38	19	51	29	49	1	50	9†	40	27†	36	13†	19	20	- 1	20
Sutton	- 8	5	10	11	20	3†	13	2	37	3†	48	15	51[g]	12	.....	.....	41[d]	27†	37[f]	20	.....	.....	7[c]	18
Union	2	6†	12	2†	19	12	18	1	35	3	47	1	50	1†	42	27	36	29	32	19	16	14	10	15
Williamson	11	11	18	11	27	2†	25	1†	42	12	55	30	55	1	54	27	51	27†	45	21	25	14	15	15

†Also other dates.

CHART SHOWING LOCATION OF OBSERVATION AND FORECAST DISPLAY STATIONS



TOTAL ANNUAL PRECIPITATION 1919


50
40
50
40
50
50
40
50
50
50
40
50
50
50

COOPERATIVE STATIONS AND OBSERVERS

Station.	Observer.
Bancroft	R. E. Dent
Bayard	G. C. Dixon
Beckley	John A. Ewart
Bens Run	J. D. Riggs
Bluefield	Norfolk & Western Railway Co.
Brandonville	W. H. Miller
Brandywine	Elmer Keister
Breading	Emory R. Noel
Buckhannon	H. A. Darnall
Burlington	J. W. Vandiver
Cairo	J. E. Overton
Camden-on-Gauley	Miss Katie Jarvis
Charleston	C. V. Lewis
Clay	Prof. E. H. Knabenshue
Cortland	Samuel Harmon
Cheatbridge	J. D. Wilmoth
Creston	*J. M. Reed
Cuba	Miss Faythe Howard
Dam 19, O. R	*Lockmaster
Dam 20, O. R	Lockmaster
Dam 22, O. R	Lockmaster
Dam 26, O. R	Lockmaster
Davis	Ross C. Male
Elizabeth	E. D. Ball
Elkins	U. S. Weather Bureau
Evans	B. F. Sayre
Fairmont	*F. P. Hall
Gary	U. S. Coal & Coke Co.
Glenville	*Howard R. Brannon
Grafton	W. C. Byers
Green Sulphur Springs	W. H. Gwinn
Harpers Ferry	*S. W. Lightner
Hinton	*J. B. Lavender
Holcomb	W. C. Williams
Huntington	*L. H. Hutchinson
Kayford	**Cabin Creek Con. Coal Co.
Lewisburg	George T. Argabrite
Logan	C. & O. Ry.
Lost Creek	Allen Smith
Madison	S. E. Bradley
Mannington	Jas. A. Morgan
Marlinton	S. L. Brown
Martinsburg	G. W. Van Metre
Moorefield	M. S. Henkel
Morgantown	Prof. E. L. Andrews
Moundsville	G. W. Wright
New Cumberland	M. F. Smith
New Martinsville	Wm. Ankron
Parkersburg	U. S. Weather Bureau
Parsons	J. W. Swisher
Philippi	Prof. Vernon E. Wood
Pickens	Dr. J. L. Cunningham
Piedmont	C. A. Suter, Jr.
Point Pleasant	W. D. Holmes
Powellton	J. F. Campbell
Raleigh	**Raleigh Coal & Coke Co.
Renick	**W. B. Hill
Robertsburg	E. C. Brace, Jr.
Romney	Geo. E. Arnold
Rowlesburg	*J. F. Pierce
Ryan	W. E. Ryan
Saint Marys	*William Hughes
Sissonville	J. N. Johnson
Smithfield	**G. M. Whisler
Spencer	A. M. McKown
Sutton	C. B. Eakle
Terra Alta	W. J. Grimm
Union	Edward B. Shanklin
Upper Tract	J. M. Mallow
Wardensville	Luther F. Sutton
Wellsburg	George P. Pfister
Weston	State Hospital
Wheeling	*Miss M. B. Forsyth
White Sulphur Springs	J. M. Ayres
Williamson	*J. F. Keyser

* River Observer. ** Special Rainfall Observer.

FORECAST DISTRIBUTORS AND DISPLAYMEN

[By Cards, Maps and Flags]

Station.	Distributor.
Bluefield—5	Norfolk & Western Railway Co.
Buckhannon*	Postmaster
Charleston—49	Assistant U. S. Engineer
Elkins—173	Weather Bureau Office
Grafton—63	Postmaster
Hinton—21	J. B. Lavender
Morgantown—23	Postmaster
Parkersburg—403†	Section Center
Point Pleasant—35	Miss Grace Henson
Weston—35	Postmaster

Figures represent number of places supplied with forecast cards.

* Flag display station. † Forecast cards and maps.

[By Telephone Companies.]

Arbuckle & Ripley Tel. Co.
Barboursville Tel. Co.
Beverly & Marlinton Tel. Co.
Bluefield Tel. Co.
Chesapeake & Potomac Tel. Co.
Citizens United Tel. Co.
Durbin Tel. Co.
Eastern Pendleton Tel. Co.
Enterprise Tel. Co.
Greenwood Tel. Co.
Peoples Tel. Co.
Ravenswood Tel. Co.
Union Ridge & Ohio Valley Tel. Co.

NWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JANUARY, 1920

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MAY 12, 1920

Departure of the Mean Temperature from the Normal, January, 1920.


+3°
+
−
−3°
−6°
−9°
−12°
−6°
−3°
+3°
+6°
−6°
−3°
+3°
+3°
+

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVIII. PARKERSBURG, W. VA., JANUARY, 1920. No. 1

GENERAL SUMMARY.

January was considerably colder and slightly wetter than usual, with the precipitation unfavorably distributed over the State. Although the precipitation was in excess, the snowfall was much below the January average and the ground was practically bare in many of the agricultural districts most of the month. There was a light to moderate snow-cover, however, during the cold period, or from the 2d to the 6th. Heavy rain over the central and southern counties on the 22-23d caused marked rises in the streams and rivers. A flood stage of 22.3 feet was reached at Glenville on the 23d. A severe sleet storm, generally followed by rain, which froze as it fell, occurred on the 21st-23d. The streets and roads, as well as all other exposed objects, were covered by an ice-coating, making travel difficult and dangerous. So far as known, however, the ice-coating was not heavy enough to damage fruit and shade trees or to break down telephone or telegraph wires. Winter grains were in fair to good condition at the close of the month, as there was some snow-cover during the cold weather of the month.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.26 and 30.23 inches, respectively The highest and lowest readings observed were as follows: Parkersburg, 30.74 inches on the 25th, and 29.51 inches on the 16th. Elkins, 30.69 inches on the 5th, and 29.50 inches on the 16th.

TEMPERATURE.

The monthly mean for the State, 51 stations reporting, was 28.7°. The departure from the normal for 45 stations having ten or more years of record was —4.0°. The temperature was decidedly below the normal from the 2d to the 6th, and considerably below on the 14-15th, 17-18th, and 25th, with the lowest readings occurring generally on the 3d and 5th The weather was warmest on the 7-9th, 20th-21st, 23d, and 29-30th, with the highest temperatures generally on the 9th, 20th, 23d, and 30th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 82 per cent; 8 p. m., 75 per cent. The January averages for the same hours for the past 31 years are 83 and 77 per cent, respectively. Elkins, 8 a. m., 86 per cent; 8 p. m., 79 per cent. The January averages for Elkins for the same hours for the past 19 years are 85 and 78 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 66 stations reporting was 4.12 inches. The departure from the normal for 47 stations having ten or more years of record was +0.23 inch. The precipitation was heaviest over the central and southern counties and lightest over the extreme eastern counties. Scattered light snows or snow flurries occurred from the 1st to the 4th, light to moderate rain on the 7-9th, light rain or snow from the 15th to the 19th, and sleet or rain, generally moderate to heavy, from the 21st to the 24th.

WIND.

The average wind velocity at Parkersburg was 7.0 miles per hour, or 0.4 mile above the January average for the past 31 years. The average at Elkins was 6.4 miles per hour, or 1.3 miles above the January average for 21 years. The highest velocity at Parkersburg was 34 miles per hour from the west on the 2d, and at Elkins 30 miles per hour from the west on the 13th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 25 per cent of the possible amount, or 3 per cent below the January average for 22 years. The average at Elkins was 20 per cent, or 9 per cent below the January average for 19 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Grafton, 26th; Hinton, 29th and 30th; Lewisburg, 8th; Marlinton, 8th, 9th, 21st, and 23d; Philippi, 7th, 8th, and 16th; Pickens, 9th, 21st, and 22d; Romney, 21st, 22d, 23d, and 24th; Stony River Dam, 28th; Terra Alta, 7th, 8th, and 19th; Wardensville, 9th; Weston, 3d.

Halo, lunar: Elkins, 5th.

Halos, solar: Bayard, 3d; Elkins, 3d and 6th.

Winds, high: Bayard, 14th; Bluefield, 18th; Brandywine, 13th and 14th; Burlington, 13th and 14th; Mannington, 9th and 14th; Parkersburg, 2d and 9th; Philippi, 14th and 18th; Pickens, 2d, 15th, and 16th; Upper Tract, 14th; Wardensville, 13th and 14th; Wellsburg, 13th and 14th; Weston, 13th and 31st.

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	31.7	..	....	3.64	....	....	....	..	..	..
1892	29.4	76	— 3	3.15	....	....	....	..	..	..
1893	22.6	71	—25	2.49	....	....	....	..	..	..
1894	36.6	70	— 8	2.41	4.23	0.83	....	12	8	11
1895	25.0	69	—21	4.18	6.53	2.37	....	6	9	16
1896	32.4	72	— 6	1.57	2.72	0.67	1.8	9	14	8
1897	28.8	69	—18	1.70	2.85	0.90	4.0	10	7	14
1898	37.1	75	— 5	5.10	8.04	2.24	5.0	6	9	16
1899	32.1	70	—21	4.05	7.01	2.05	7.5	10	7	14
1900	34.5	74	—10	2.24	3.60	0.82	1.9	9	8	14
1901	33.6	69	— 4	2.41	3.87	1.18	7.3	8	7	16
1902	30.2	64	— 1	3.65	8.52	1.45	9.8	9	7	15
1903	31.8	79	— 7	3.21	6.45	1.55	8.6	8	7	16
1904	27.5	72	—18	2.72	5.82	1.24	10.8	9	8	14
1905	26.4	70	—14	3.15	7.43	1.48	22.0	7	7	17
1906	38.2	80	— 5	3.79	8.70	1.36	5.1	11	7	13
1907	38.7	76	—15	6.41	11.54	2.35	5.6	6	7	18
1908	31.0	62	—16	2.92	8.19	0.50	12.8	12	7	12
1909	36.8	76	— 5	3.41	6.59	1.50	8.7	8	6	17
1910	32.0	67	— 5	5.68	10.10	2.52	15.4	6	6	19
1911	37.3	71	— 5	5.86	12.63	3.11	7.0	8	6	17
1912	23.5	66	—34	2.60	6.93	1.10	13.6	7	8	16
1913	40.7	74	9	6.23	10.53	1.84	5.7	9	6	16
1914	35.8	83	—11	3.18	5.65	1.55	15.6	7	6	18
1915	31.7	68	— 8	4.85	11.38	2.00	10.4	8	6	17
1916	38.8	79	—10	4.86	8.52	1.70	6.1	13	7	13
1917	33.2	77	— 9	4.66	7.67	1.72	8.3	11	6	14
1918	20.7	55	—27	4.24	9.22	2.00	21.5	8	5	18
1919	34.1	69	—16	3.79	6.56	1.60	6.9	16	4	11
1920	28.7	77	—11	4.12	7.26	0.40	3.9	8	6	17
Means and extremes	32.0	83	—34	3.75	12.63	0.40	9.0	9	7	15

Climatological Data for January, 1920.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	19	24.4[c]	− 3.8	56[b]	9†	− 8[c]	3	42[c]	3.02	−2.11	0.59	13.2	19	2[b]	7[b]	20[b]	w.	G. C. Dixon.
Brandywine	Pendleton		4	31.1	.....	60	9†	− 3	5	40	2.05	.....	.....	1.0	7	16	1	14	n.	Elmer Keister.
Burlington	Mineral	875	26	25.6	− 5.2	49	30	2	4	32	2.79	+0.15	.....	4.5	8	10	15	6	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	241	31	.....	.....	.....	.....	.....	.....	.....	0.40	−2.43	0.10	1.0	4	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	28	25.6	− 5.1	55	30	6	3†	34	2.62	+0.04	.....	3.0	8	18	2	11	nw.	G. W. Van Metre, C. E.
Moorefield[a]	Hardy	900	24	29.6	− 2.5	59	30	4	5†	38	1.96	+0.64	0.50	4.0	8	21	1	8	.....	M. S. Henkel.
Piedmont	Mineral	919	7	25.8	.....	54	30	1	3†	33	2.78	.....	0 63	.....	10	7	14	10	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	22	27.0	− 4.0	58	30	2	3	41	2.62	−0.11	....	4.0	7	7	9	15	w.	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	21	26.3	− 7.4	56	30	1	5	40	1.30	−1.31	0.70	.....	6	12	5	14	.....	I. M. Mallow.
Wardensville	Hardy	1,200	2	29.1	.....	60	30	1	3†	42	1.01	.....	.....	1.0	7	12	6	13	e.	Luther F. Sutton.
Averages and	extremes	.....	....	27.2	− 4.7	60	9†	− 8	3	42	2.06	−0.73	0.70	4.0	8	12	7	12	w.	
Northern Division.																				
Bens Run	Pleasants	622	18	28.2	− 4.1	53	30	1	3	39	3.68	−0.77	0.87	5.0	10	12	7	12	.....	J. D. Riggs.
Brandonville	Preston	1,809	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	23	30.0	− 1.7	62	23	− 5	5	33	5.11	+0.58	1.00	4.0	12	4	4	23	.....	H. A. Darnall.
Cortland	Tucker	3,300	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	18	30.1	− 3.5	64	20	− 5	5	39	5.20	+1.43	1.45	4.7	14	6	1	24	w.	J. M. Reed.
Davis	Tucker	3,093	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Branson Harper.
Elizabeth	Wirt	646	8	.....	.....	.....	.....	.....	.....	.....	3.67	.....	1.02	.....	12	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	19	28.2	− 0.8	64	23	− 3	3	37	4.66	+1.32	1.21	5.8	20	4	5	22	w.	U. S. Weather Bureau.
Fairmont	Marion	883	14	26.6	− 6.6	56	20	− 1	5	37	3.15	−0.82	0.76	2.5	15	6	3	22	w.	F. P. Hall.
Glenville	Gilmer	738	26	30.4	− 2.8	60	9†	− 6	5	38	5.15	+0.83	1.44	4.4	14	7	11	13	w.	Howard R. Brannon.
Grafton	Taylor	1,000	27	28.2	− 4.4	59	9	− 5	5	37	4.35	+0.27	.....	2.5	11	4[a]	11[a]	15[a]	e.	W. C. Byers.
Lost Creek	Harrison	1,026	22	30.2	− 2.6	60	8	− 8	5	38	3.98	−0.11	1.02	2.8	10	5	7	19	w.	Allen Smith.
Mannington	Marion	974	17	27.2	− 4.2	58	21	− 7	5	36	3.65	−1.02	0.81	3.5	19	3	7	21	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	27	26.2	− 5.9	55	20†	1	4	39	2.52	−1.38	0.60	0.8	7	1[a]	1[a]	28[a]	.....	Prof. E. L. Andrews.
Moundsville	Marshall	642	17	24.8[a]	− 7.5	58[a]	19	1	4	42[a]	3.52	+0.30	0.75	6.0	10	7	8	16	nw.	J. Z. Terrell.
New Cumberland	Hancock	987	22	22.6	− 5.8	50	21	− 4	5	34	2.33	−0.45	0.75	10.0	11	10	11	10	nw.	M. F. Smith.
New Martinsville	Wetzel	634	26	27.2	− 5.6	52	20†	− 2	3†	33	3.20	−0.58	0 90	.....	5	8	5	18	n.	Wm. Ankrom.
Parkersburg	Wood	638	33	28.4	− 3.0	62	20	1	5	40	3.83	+0.64	1.21	3.1	12	6	4	21	nw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	20	27.4	− 4.0	57	22	− 5	4	41	6.39	+1.70	.....	6.0	9	3	6	22	.....	J. W. Swisher.
Philippi	Barbour	1,149	23	28.8	− 4.3	64	23	− 4	3†	40	4.53	+0.23	0.77	4.1	17	11	7	13	w.	Prof. Vernon E. Wood.
Pickens	Randolph	2,697	17	27.8	− 3.6	60	23	−11	3	35	6.41	−0.28	.....	15.0	15	7	4	20	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	33	.....	.....	.....	.....	.....	.....	.....	4.33	−0.17	0.98	.....	18	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	11	.....	.....	.....	.....	.....	.....	.....	3.77	−0.90	1.14	2.8	10	.....	.....	.....	w.	Wm. Hughes.
Smithfield	Wetzel	835	14	22.8	− 8.4	52	30	− 5	5	38	3.43	−1.90	1.35	4.8	13	13	6	12	nw.	G. M. Whisler.
Stony River Dam	Tucker	.....	0	.....	.....	.....	.....	.....	.....	.....	2.75	.....	0.76	4.8	10	5	7	19	w.	A. C. Becker.
Terra Alta	Preston	2,612	19	24.0	− 4.0	54	9	− 4	4†	39	.....	.....	.....	.....	.....	3	3	25	w.	W. J. Grimm.
Wellsburg	Brooke	1,225	19	24.1	− 5.9	49	21	− 6	4	37	3.09	−0.37	0.89	6.5	13	10	7	14	.....	George P. Pfister.
Weston	Lewis	1,026	24	28.6	− 5.0	63	8	− 4	3†	44	4.89	+0.74	0.94	5.3	18	5	13	13	ne.	Weston State Hospital
Wheeling	Ohio	645	33	25.4	− 5.7	57	20	0	3	42	3.50	+0.36	1.12	6.1	13	11	5	15	w.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	27.1	− 4.5	64	20†	−11	3	44	4.04	−0.01	1.45	5.0	13	7	6	18	w.	
Southern Division.																				
Bancroft	Putnam	574	16	31.8	− 2.8	66	20	0	3†	42	5.62	+1.29	1.40	0.5	8	15	0	16	nw.	R. E. Dent.
Beckley	Raleigh	2,440	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John A. Ewart.
Bluefield	Mercer	2,558	25	33.6	− 0.9	62	23†	− 2	3	37	3.73	+0.61	1.00	6.0	15	7	7	17	.....	Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	5	.....	.....	.....	.....	.....	.....	.....	7.24	.....	1.60	13.0	14	6	0	25	n.	Miss Katie Jarvis.
Charleston	Kanawha	597	17	36.4	− 2.4	77	20	6	5†	49	7.19	+3.34	1.90	T.	11	7	0	24	n.	C. V. Lewis.
Clay	Clay	706	4	.....	.....	.....	.....	.....	.....	.....	4.94	.....	1.20	1.3	12	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	18	29.6[c]	− 3.9	62	21	− 4[c]	5	34[c]	4.74	+1.08	0.75	2.0	11	5	14	12	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	4	.....	.....	.....	.....	.....	.....	.....	4.25	.....	1.33	3.5	13	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	4	.....	.....	.....	.....	.....	.....	.....	4.72	.....	1.29	3.7	10	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	5	.....	.....	.....	.....	.....	.....	.....	4.27	.....	1.05	2.9	11	.....	.....	.....	nw.	Lockmaster.
Dam 26 O. R.	Mason	505	4	.....	.....	.....	.....	.....	.....	.....	4.22	.....	1.40	.....	9	.....	.....	.....	.....	U. S. Engineer Office.
Evans	Jackson	606	8	30.6	.....	58	20	− 3	5	31	4.01	.....	0.80	3.0	12	7	1	23	.....	B. F. Sayre.
Gary	McDowell	1,426	4	.....	.....	.....	.....	.....	.....	.....	5.64	.....	1.75	.....	12	17[b]	0[b]	12[b]	.....	U. S. Coal & Coke Co.
Gassaway	Braxton	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.56	.....	1.34	2.0	4	.....	.....	.....	.....	W. H. Gwinn.
Green Sulphur Spgs[b]	Summers	1,600	24	33.9	.....	59	30	15	18†	43	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. A. Hays.
Hinton	..do	1,450	23	32.0	− 2.3	65	30	1	3	44	4.32	+1.14	1.36	1.5	12	5	0	26	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	8	30.6	.....	62	23	− 9	3	38	5.61	.....	1.03	7.8	13	5	2	24	.....	W. C. Williams.
Huntington	Cabell	538	26	30.2	− 2.7	64	20	4	3†	39	5.04	+1.25	2.54	1.0	12	8	0	23	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	1	....	.....	.....	.....	.....	.....	.....	5.22	.....	1.10	P.	10	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	4	.....	.....	.....	.....	.....	.....	.....	5.76	.....	1.20	.....	15	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	20	29.8	2.2	61	9	− 3	3	38	3.45	+0.08	0.96	1.0	7	7	8	16	nw.	Geo. T. Argabate.
Logan[b]	Logan	687	17	35.2	− 3.8	72	23	4	5†	39	7.26	+2.37	1.90	1.5	9	7	3	19	.....	W. C. Flanagan.
Madison	Boone	704	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	21	25.3	− 3.0	50	9†	− 6	3	40	4.03	−0.01	1.95	1.0	9	5	12	14	sw.	S. L. Brown.
Point Pleasant	Mason	553	27	30.0	− 3.7	61	20†	1	5	37	4.23	+0 34	0.82	T.	11	8	4	19	.....	W. D. Holmes.
Powellton	Fayette	933	24	34.0	− 3.0	67	23	2	5	34	5.86	+2.01	1.43	2.8	14	17[a]	4[a]	9[a]	.....	Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	4	.....	.....	.....	.....	.....	.....	.....	4.95	.....	1.30	2.4	11	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	4	.....	.....	.....	.....	.....	.....	.....	3.31	.....	1.85	.....	5	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	20	28.4	− 5.3	65	20	− 4	5†	42	5.04	+1.09	1.39	2.5	12	5	2	24	.....	E. C. Brace, Jr.
Ryan	Roane	700	17	29.4	− 4.1	64	20†	− 9	5	37	4.79	+0.60	1.08	2.1	17	7	2	22	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	16	28.8	− 5.1	64	19	− 3	3	52	5 33	+1.06	1.40	2.0	11	4	10	17	.....	A. M. McKown.
Sutton[c]	Braxton	839	14	31.2	− 2.6	59	23	2	4	30	1.43	−3.47	0.35	4.5	9	8	4	16	.....	Lawrence Freeman.
Union	Monroe	2,250	16	30.4	− 2.3	55	21	0	3	59	4.85	+1.29	1.25	.....	6	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Ayres.
Williamson	Mingo	660	20	33.4	− 2 6	65	23	3	6	58	6.33	+2.11	1.12	2.0	14	8	4	19	w.	J. F. Keyser.
Averages and	extremes	.....	....	31.2	− 3.1	77	20	− 9	3†	52	4.84	+0.95	2.54	2.8	11	8	5	18	nw.	
State averages and	extremes	.....	....	28.7	− 4.0	77	20	−11	3	52	4.12	+0.23	2.54	3.9	11	8	6	17	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[c] Approximated by the observer.

Daily Precipitation for January, 1920.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac	T.	.04	.02				.09	.21	.54	.01	.04	T.	.02	.08	.08	.16	.08	.06	.32		.15	.16	.35	.59	.02							3.02
Brandywine	....do								.05	.10							.10				T.	*	*	1.35	.45							2.95
Burlington	....do		.04						*	1.15					T.		.30					*	*	*	1.30							2.79
Harpers Ferry	....do									.10														.10		.10						0.40
Martinsburg	....do								*	.97							.20			.10		.33	*	*	1.02							2.62
Moorefield	....do	.06							.08								.16			.16		.20	.40	.40	.50							1.96
Piedmont	....do		.25		T.			.20	.25	.65		T.		T.			.29	.16		.07		T.	.32	.56	.25		T.		T.			2.78
Romney	....do							T.	*	1.25							.16	*		.15		*	*	*	1.05							2.62
Upper Tract	....do								.15		.15						.16				T.	*	.70	T.	.20	T.							1.30
Wardensville	....do		T.		T.				.20	.10							.08			T.		.30	*	*	.33								1.01
Northern Division.																																	
Bens Run	Ohio	.03						.10	.50	.53						.10	.40			.20		.50	.45	.87									3.68
Brandonville	Monongahela																																
Buckhannon	....do	T.	T.	T.	.10			T.	.80	.60		T.		T		.10	.30	.25	.10	.10		.86	1.00	.50	.40	T.							5.11
Cortland	Monongahela																																
Creston	Little Kanawha		T.	.02	.05			.05	.25	1.28						.10	.03	.07	.03	.06		.56	.47	1.45	.18	T.			T.				5.20
Davis	Monongahela																																
Elizabeth	Little Kanawha	.04			.01			.31	1.02							.05	.07	.27		.05		.50	.43	.80	.12								3.07
Elkins ***	Monongahela	.06	.05	.02	.05	T.		.11	.44	.36	.01	.02		.02	T.	.10	.48	.12	.06	.07	T.	.87	1.17	.32	.34	T.		T.	.01				4.66
Fairmont	....do		T.	T.	.03	T.		.07	.24	.76	.04		T.	T.	T.	.04	.04	.36	.02	.06		.35	.20	.72	.14	.08	T.						3.15
Glenville	Little Kanawha	T.		.03	.05				.08	1.44						.12	.03	.61	.14	.08		.50	.62	1.12	.25	.08							5.15
Grafton	Monongahela		T.					*	*	1.85	T.				T.	.12	*	.55		.08		*	*	*	1.75								4.35
Lost Creek	....do.	T.	T.	T.	T.			T.	.24	.72		T.		T.	T.	.05	.52	.24	T.	.08		1.02	.56	.49	.06	T.							3.98
Mannington	....do	.03	.05	T.	.02			.11	.51	.81		.01	T	.02		.07	.31	.15	.02	.06	.02	.41	.46	.51	.09	.01			T.				3.65
Morgantown	....do		T.					T.	.50	.50		T.				.04	.30				T.		.35	.60			.23					2.52
Moundsville	Ohio							.75	.60		.02		.04		.08		.45		.08		.40		.40	.70								3.52
New Cumberland	....do	.12	T.		T.			.01	.75	.15					T.	.08	.24	.04	T.	.08	.75		.04	.07	T.				T.				2.33
New Martinsville	....do	T.	T.		T.				.80			T.		T.		T.	.50	T.	T.	.20		T.	.80	.90									3.20
Parkersburg ***	Ohio	T.	T.	.01	T.			.12	1.11	.16						14	.35	.02	T.	.07	.04	.33	.55	.93	T.	T							3.83
Parsons	Monongahela	T.	T.							T.	1.80		T.			T.		.16	.08	.77	.24		1.00	*	*	T	2.34						6.39
Philippi	....do	T.	.08	T.	.05	T.		.12	.35	.62	T.	.02	T.	T.	T.	.05	.45	.05	.01	.02		.77	.75	.65	.50	.01	.03						4.53
Pickens	....do	.08	.16	T.	.16			*	*	2.55		.08		T.		.08	.39	.24	.24			.48	1.00	.43	.52	T.							6.41
Rowlesburg	....do		.03	.04	.03				.23	.55	.15		.01		.04	.05	.09	.85	.08	.07		.48	.15	.98	.46	.04							4.33
Saint Marys	Ohio				T.				.18	1.14						.15	.05	.26		.10		.44	.15	.65	.65								3.77
Smithfield	Fishing Creek	T.	.02	.04	.04		.02	.07	.38	1.35			T			.08	.08		.02	.08		.95			.30								3.43
Stony River Dam								.19	.76				.07				.16	.31	.08			.15	.54	.22	.28								2.76
Terra Alta	Monongahela							.15	.27	.60												1.30	.42	.50	.25								+++
Wellsburg	Ohio	T.	.08		T.			.02	.89	.78		.01				.04	.39	.03		.04	.06	.24	.11	.40		T.							3.09
Weston	Monongahela	.03		.05	.05			.16	.20	.87	.07		T.	.01		.12	.05	.72	.03	.10		.65	.45	.94	.26	.13							4.89
Wheeling	Ohio		T	.01	.01			T.	.52	1.12	.01		.01	T.		.05	.03	.48	T.	.07	T.	.36	T.	.20	.63	T.							3.50
Southern Division.																																	
Bancroft	Great Kanawha	T.			T.				1.08	1.40						.04		T.	T.			.75	.43	1.17	.70	.05							5.62
Beckley	....do																																
Bluefield	....do	.08	.12	.12		.10	.19	.30	.05												.20	.08	.08	.20		.30	1.00	.55	.45				3.73
Camden-on-Gauley	....do	.08	.16	.16	.16	.08	T.	T.	1.00	.80	T.				T.		T.	T.	.08	.16	.16	1.60	.80	1.20	.80								7.24
Charleston	....do	.10	T.	T.	T.			T	.30	1.62	T.					T.	.12	.60	.10			.35	1.20	1.90	.60	.30							7.19
Clay	....do		T.	T.	.10				.30	.94	.06				T.		.04	.66	.03			.51	.45	1.20	.50	.15	T.						4.94
Cuba	Sand Creek	.50	T.	T.	T.			.35	.60	.75						.08	.55	T.		.08	T.	.45	.60	.65	.13	T.	T.						4.74
Dam 19 O. R.	Ohio				.01	.01		.13	.12	1.33	T.					.07	.10	.38	T.	.12		.37	.15	.71	.75	T.			T.				4.25
Dam 20 O. R.	....do				T.			.20	.33	1.24						.08	.08	.43	T.	.12		.41	T.	1.29	.54								4.72
Dam 22 O. R.	....do	.24			T.	T.		.28	.41	1.05					T.	.10	.07	.32	T.			.36	.41	.85	.18	T.							4.27
Dam 26 O. R.	....do							.02	.22	1.40							.02	.22				.52	.60	.80	.42								4.22
Evans	Ohio		T.		.24			.17	.60	.80					T.	T.	.06	.19		.02	.03	.50	.62	.68	.10								4.01
Gary	Big Sandy	.22	T.	T.	T.	.02			.08	.10							.19	.15	T.	T.		.76	1.75	1.47	.49	.34			.09				5.64
Gassaway	Great Kanawha		.20						.41														1.34	.61									2.56
Green Sulpr. Spgs.	....do																																+++
Hinton	....do	.10		T.	.04			T.	.04	.30	T.					T.	.10	.08	.06			.44	1.36	1.04	.40	.36			T.				4.32
Holcomb	....do		.12		.04				1.00	.14						.04	.31	.29	.20	.05		1.03	.98	.30	.81								5.61
Huntington	Ohio	.04	T.	T.	.02			.15	.70	1.84						.06	.04	T.	T.			.54	.84	.54	.52	.02							5.04
Kanawha Falls	Great Kanawha	.30	T.					.10	.30	.90						T.	.15	T.	T.			.67	1.10	.75	.80	.15							5.22
Kayford	....do			.30	.05	T.			.56	.73	.13					*	.25	*	.21	T	*	.56	1.20	.45	.93	.39							5.76
Lewisburg	.... do		T.						.57							T.	.08	.33	T.		T.	.55	.96	.51	.45	T.							3.45
Logan	Guyandotte			.04	1.00			.07	.50	1.05												.93	1.90	.71	1.06								7.26
Madison	Great Kanawha																																
Marlinton	....do	T.	T.	T.	T.			.12	.58	.14	T.	T.				T.	.14	T.	T.		.30	.75	1.20	.10	.70								4.03
Point Pleasant	Ohio	.14		T.				.29	.70	.81						T.	.15			.12	.02	.66	.82	.48					.04				4.23
Powellton	Great Kanawha	.28		T.	.08			.18	.83	.35						.02	.25	.15		.15	.02	1.43	.95	.40	.77								5.86
Raleigh	....do				.05					.93						.04	.22	.15	.21			.70	1.30	.82	.45	.08							4.95
Renick	....do								.70							.02						1.85	.50	.24									3.31
Robertsburg	....do				.08	.08		.62	.43	1.39						.04		.30				.48	.18	.90	.44	.10							5.04
Ryan	....do.	.02	.02	.01	.03			.19	.71	.88	T.					.03	.19	.13	.04	.01		.84	1.08	.34	.26				.01				4.79
Sissonville	....do																																
Spencer	Little Kanawha	.20	T.	T.	.08				.52	1.12						.08		.58			.63	.21	1.40	.45				.06					5.33
Sutton	Great Kanawha		.08						.18	.35						.16	.18	.08	.04				.20	.16									1.43
Union	....do									.75							.25					1.00	1.25	.75	.85								4.85
White Sulphur Spgs.	....do																																
Williamson	Big Sandy			.02	.10			.10	.35	1.10						.02	.20	.18	.05	T.		1.04	1.12	1.00	.90	.15							6.33

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‡ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement

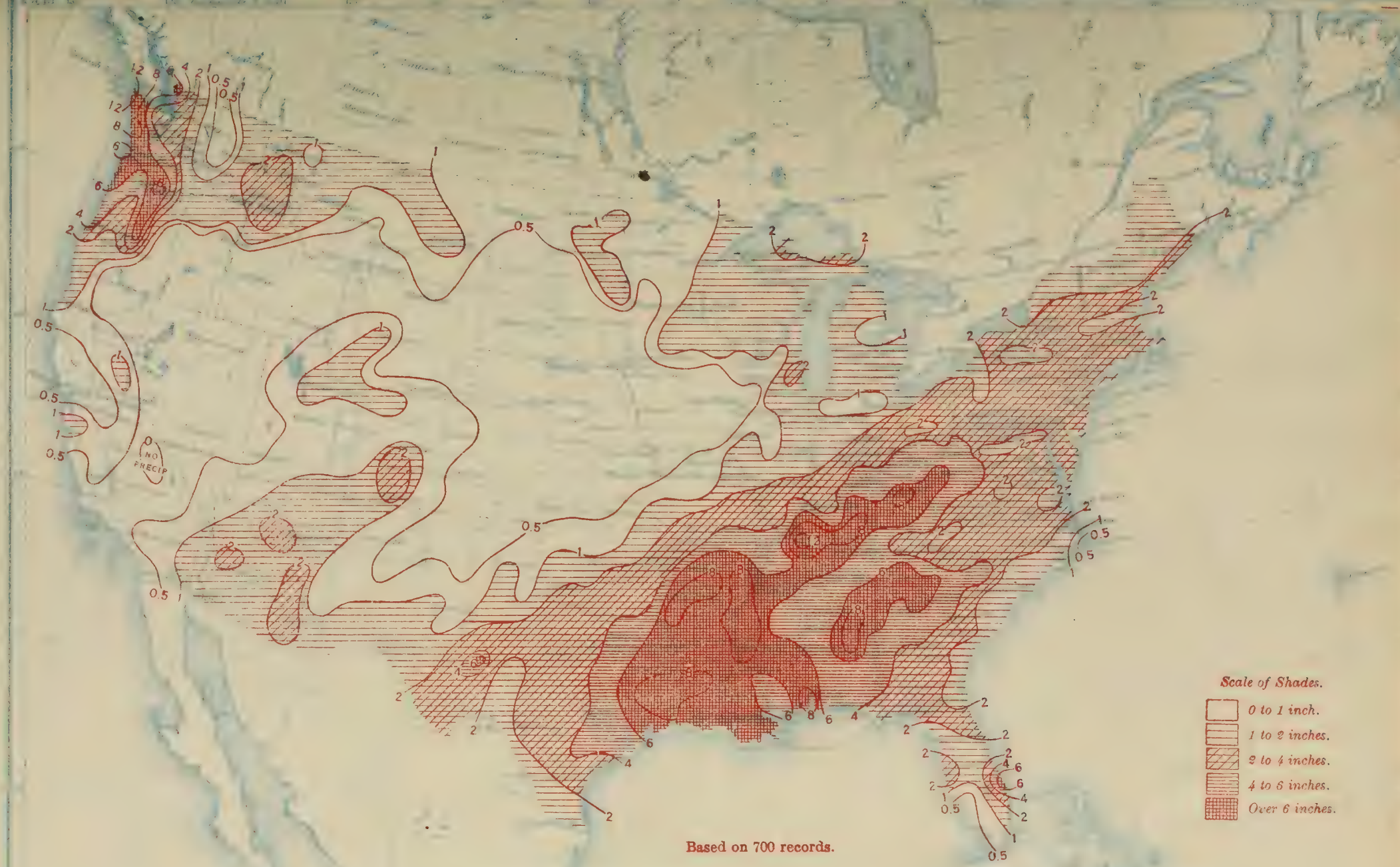
T. Trace, or less than 0.01 inch.

+++ Probably incomplete.

Daily Temperatures for January, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	45	40	10	8	18	38	45	48	56	30	33	30	31	26	26	25	35	15	40	38	56	32	32	49	30	26	42	38	46	..	..	34.1
	Minimum	..	2	− 8	− 4	− 1	− 4	28	35	30	19	20	20	19	10	10	10	8	5	7	18	28	25	25	30	12	16	22	22	11	..	..	14.8
Brandywine	Maximum	47	32	22	22	30	42	44	52	60	54	40	38	40	35	35	35	38	25	47	48	44	38	40	38	38	32	52	42	54	60	39	40.7
	Minimum	32	7	− 1	4	− 3	2	28	42	42	24	20	22	25	21	12	22	18	15	18	26	28	27	26	33	24	20	29	29	15	30	28	21.5
Burlington	Maximum	47	23	17	17	18	31	33	38	48	35	40	35	43	35	34	29	33	22	35	34	35	30	31	35	33	23	38	42	35	49	42	33.5
	Minimum	23	11	4	2	5	4	21	32	30	25	20	20	15	19	20	19	15	15	8	19	20	21	26	30	20	14	21	24	13	17	14	17.6
Martinsburg§	Maximum	46	24	17	19	25	32	39	37	48	37	43	39	43	24	32	22	28	23	32	31	36	27	33	34	26	26	41	40	33	55	25	32.8
	Minimum	22	13	6	6	8	16	13	29	33	30	25	26	21	22	17	20	15	16	8	15	18	22	20	23	22	13	14	23	18	21	20	18.4
Moorfield	Maximum	46	35	20	..	30	34	40	43	47	43	46	43	46	44	40	36	34	30	30	43	35	34	32	34	34	28	39	42	40	59	57	38.8
	Minimum	26	10	6	..	4	4	24	33	34	27	21	26	16	21	16	21	20	15	6	21	22	25	25	30	22	16	23	33	17	21	26	20.4
Piedmont	Maximum	45	25	13	14	22	31	33	39	48	34	38	33	41	34	29	27	34	17	43	42	36	28	29	33	29	22	49	44	34	54	45	33.7
	Minimum	25	9	1	1	8	5	25	33	32	27	19	23	17	16	15	18	15	12	11	18	22	21	23	29	19	14	19	27	14	21	19	18.0
Romney	Maximum	47	35	21	20	28	33	35	40	47	44	44	38	44	43	37	32	33	24	27	33	30	32	32	34	35	28	39	42	39	58	53	36.4
	Minimum	25	8	2	3	7	4	23	30	33	20	23	24	9	19	16	19	16	13	10	18	20	21	25	29	20	14	20	29	14	17	19	17.7
Upper Tract	Maximum	30	20	20	20	25	40	49	51	50	48	40	40	35	30	30	25	25	25	30	50	44	40	36	35	34	33	40	43	40	56	40	36.3
	Minimum	15	10	2	3	1	5	20	23	22	23	19	20	20	20	15	14	15	16	6	20	20	22	24	24	18	18	20	22	17	16	15	16.3
Wardensville	Maximum	52	20	21	19	29	36	42	37	50	39	44	40	44	39	33	31	35	35	45	33	35	31	32	33	34	25	43	43	38	60	59	37.3
	Minimum	14	12	1	13	7	1	18	30	32	26	17	24	31	23	25	22	23	21	26	16	21	18	24	28	24	22	23	30	29	30	17	20.9
Northern Division.																																	
Bens Run	Maximum	45	22	14	18	27	35	42	44	44	35	33	35	40	31	27	34	42	21	43	59	59	33	37	37	34	43	43	39	46	53	38	37.2
	Minimum	20	10	1	5	3	8	29	34	29	27	22	22	25	18	7	22	16	12	17	20	26	24	32	23	16	17	25	24	18	24	19	19.2
Buckhannon	Maximum	48	25	15	13	19	33	45	45	60	31	36	32	40	30	30	30	42	42	20	46	57	55	36	62	56	30	40	46	47	46	54	40	39.4
	Minimum	24	10	0	5	− 5	3	30	39	31	25	23	23	21	16	18	25	16	13	13	26	27	25	35	29	18	19	33	24	18	26	24	20.5
Creston	Maximum	50	29	20	16	27	34	39	41	37	36	36	37	44	40	30	41	45	21	51	64	63	34	37	39	28	40	47	46	49	56	54	39.7
	Minimum	26	9	− 3	4	− 5	3	29	35	27	27	31	25	20	19	13	26	19	12	19	25	28	26	32	27	19	19	32	28	16	22	25	20.5
Elkins	Maximum	49	15	12	8	19	30	45	48	60	29	33	31	35	25	27	43	41	17	48	59	58	39	64	55	22	41	46	40	51	54	35	38.0
	Minimum	13	1	− 3	1	− 1	− 2	24	36	23	21	21	21	24	13	14	24	12	11	17	28	28	27	32	22	17	22	38	20	16	25	23	18.5
Fairmont§	Maximum	33	20	15	18	23	38	42	40	49	31	34	35	40	21	28	41	23	24	44	56	30	34	47	34	23	42	46	35	49	54	53	35.5
	Minimum	20	9	0	0	− 1	2	6	33	33	26	21	22	21	18	14	18	23	10	10	19	22	24	30	34	16	16	23	30	17	19	18	17.8
Glenville	Maximum	46	30	18	15	22	35	38	42	60	38	36	40	44	40	31	38	45	20	52	60	60	33	45	52	28	39	48	41	55	60	53	40.8
	Minimum	28	10	− 4	7	− 6	1	27	34	34	26	20	24	18	18	14	26	19	14	17	26	29	26	32	27	18	19	19	15	27	22	36	20.1
Grafton	Maximum	44	27	16	13	18	37	37	42	59	32	35	37	40	34	30	38	42	19	39	56	58	37	45	56	32	41	47	44	47	52	42	38.6
	Minimum	25	7	− 4	4	− 5	0	27	33	30	22	20	20	20	15	12	21	15	11	10	20	24	24	32	25	16	18	30	26	16	21	18	17.8
Lost Creek	Maximum	46	27	17	15	24	37	44	60	57	34	34	35	42	36	27	35	40	20	46	59	59	34	44	56	32	39	45	45	50	55	55	40.3
	Minimum	27	8	− 6	4	− 8	− 1	27	43	32	26	19	22	22	18	11	22	17	12	13	34	25	25	33	32	18	18	26	29	15	32	30	20.2
Mannington	Maximum	37	25	15	15	22	35	43	48	32	32	33	40	34	26	35	42	28	43	39	58	35	38	48	26	40	45	41	47	53	44	36	36.8
	Minimum	25	8	− 4	− 2	− 7	1	26	34	31	26	19	23	19	18	13	20	17	12	7	19	25	24	33	26	14	16	24	25	16	22	18	17.7
Morgantown	Maximum	48	23	15	10	14	33	42	43	35	29	29	29	33	34	22	30	39	17	34	55	55	35	45	45	24	35	41	43	38	38	39	34.2
	Minimum	22	7	2	1	2	5	33	35	28	25	24	20	26	14	13	17	14	10	13	16	21	22	31	23	11	14	33	22	14	34	15	18.3
New Cumberland	Maximum	40	17	12	20	22	31	38	39	35	29	30	28	37	30	28	19	27	14	31	45	50	29	34	32	18	40	41	38	40	46	39	31.6
	Minimum	16	3	− 2	− 2	− 4	9	30	32	23	23	18	20	20	13	10	12	8	8	1	11	19	15	19	16	7	7	26	18	8	29	7	13.5
New Martinsville	Maximum	44	24	14	20	25	35	40	40	42	35	33	36	38	34	26	32	34	20	42	52	34	35	38	38	30	46	42	38	46	52	41	35.7
	Minimum	20	10	− 2	4	− 2	6	22	36	29	27	24	22	23	16	13	20	16	12	14	19	25	23	32	24	14	17	24	26	18	24	18	18.6
Parkersburg	Maximum	49	21	14	16	24	34	44	40	45	35	36	36	40	28	29	44	37	20	46	62	48	34	35	34	25	40	44	39	43	53	35	36.4
	Minimum	15	6	2	8	1	10	32	34	28	27	26	23	28	19	20	24	16	12	19	22	25	21	32	20	16	19	27	24	19	30	21	20.3
Parsons	Maximum	46	42	26	12	11	21	32	33	55	50	31	34	26	37	31	28	37	30	17	45	46	41	57	55	53	28	40	47	58	51	48	36.9
	Minimum	25	19	7	− 5	2	2	4	17	33	28	21	21	16	13	15	15	23	15	11	5	24	28	28	33	28	18	21	35	20	15	18	17.9
Philippi	Maximum	32	28	19	10	18	36	44	48	62	32	33	31	38	33	26	39	40	17	45	62	39	40	64	59	33	42	45	44	47	53	46	38.9
	Minimum	28	8	− 4	3	− 4	4	31	37	31	23	23	20	25	15	14	22	13	11	13	22	23	23	34	27	15	17	35	19	15	32	19	19.2
Pickens	Maximum	47	18	10	5	21	39	38	49	48	30	32	29	34	26	27	42	42	15	45	53	54	59	60	54	27	43	45	41	50	52	40	37.9
	Minimum	27	14	7	− 5	− 9	4	34	36	23	18	21	17	20	11	11	20	10	8	10	29	29	28	53	24	17	17	35	23	15	23	23	17.8
Terra Alta	Maximum	45	21	10	8	14	33	40	41	54	28	29	25	30	28	20	24	37	10	37	36	52	26	51	53	50	26	39	38	42	46	45	33.5
	Minimum	21	1	3	− 4	− 4	3	26	35	27	19	19	15	18	8	8	16	9	4	5	15	21	18	23	26	11	11	21	19	12	31	15	14.6
Wellsburg	Maximum	40	23	13	17	22	34	41	40	39	29	30	30	37	34	34	32	39	17	37	35	49	32	33	36	21	40	40	39	41	45	36	33.4
	Minimum	22	6	11	− 6	− 4	6	29	33	27	23	16	16	14	16	14	16	11	10	0	11	23	16	22	20	10	10	20	22	13	21	11	14.8
Weston	Maximum	35	19	15	10	24	38	46	63	59	38	36	37	41	24	28	44	26	26	59	60	34	35	61	39	22	38	46	38	50	56	38	38.1
	Minimum	19	10	− 4	− 3	− 4	− 1	5	35	34	26	23	23	24	18	15	20	24	14	15	24	28	25	31	35	18	19	22	31	18	20	25	19.0
Wheeling§	Maximum	34	31	11	23	28	36	41	40	40	35	32	36	40	25	31	40	28	20	38	57	30	32	35	29	21	46	42	32	47	52	32	34.3
	Minimum	21	9	0	1	1	4	10	35	31	26	25	22	22	18	15	18	15	10	5	15	19	20	25	26	12	12	15	27	15	20	15	16.4
Southern Division.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Bluefield	Maximum	54	19	17	17	25	35	50	55	58	38	36	34	36	37	42	46	46	32	50	52	46	47	62	62	43	35	44	45	56	55	55	42.9
	Minimum	19	17	− 2	6	1	8	31	44	38	22	21	21	25	22	22	32	19	14	18	40	46	32	35	43	26	21	26	34	19	29	28	24.4
Charleston	Maximum	50	54	32	35	36	40	45	45	60	57	55	49	45	44	42	40	38	32	59	77	76	58	75	72	60	58	49	45	46	59	54	51.2
	Minimum	38	14	2	2	0	0	9	15	29	29	22	26	24	25	26	25	29	23	18	28	28	29	30	34	22	22	24	25	21	22	28	21.6
Green Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	41	44	39	38	35	36	25	58	47	42	41	50	47	43	32	48	42	50	59	44	43.0
	Minimum	..	..	..	..	..	..	..	..	..	..	..	22	16	23	20	24	18	15	15	32	36	34	35	39	22	25	30	30	16	20	24	24.8
Hinton§	Maximum	46	22	24	14	32	33	37	42	64	46	42	47	47	37	41	41	35	39	62	49	41	37	49	48	31	33	49	43	58	65	38	41.7
	Minimum	19	12	1	2	6	8	9	30	35	26	23	23	19	26	23	24	32	18	18	24	35	35	34	36	24	24	27	30	20	21	25	22.2
Holcomb	Maximum	44	27	15	14	20	39	47	55	58	33	35	33	37	35	31	39	41	18	51	52	51	45	62	55	33	39	47	44	49	51	38	39.9
	Minimum	22	6	− 9	− 4	− 5	2	28	36	32	22	19	21	16	18	12	28	14	13	13	33	34	30	41	32	20	23	30	28	17	23	25	20.0
Huntington§	Maximum	34	22	19	19	27	36	44	42	47	40	40	40	45	29	40	48	27	26	57	64	33	33	38	34	24	39	47	36	47	59	39	37.9
	Minimum	28	14	4	4	7	6	12	34	35	29	25	25	25	24	24	27	27	18	18	26	31	28	29	32	21	20	23	30	21	21	29	22.5
Lewisburg	Maximum	47	28	18	16	25	32	38	43	61	37	38	37	39	36	36	34	37	20	51	49	45	40	42	49	37	30	47	44	48	55	50	39.0
	Minimum	28	8	− 3	6	1	3	22	35	36	22	17	21	16	21	17	24	16	13	13	34	31	30	31	37	23	23	27	29	16	20	25	20.7
Logan§	Maximum	..	28	24	22	21	38	50	62	63	46	42	40	44	42	44	51	40	40	58	67	48	40	72	45	46	43	47	45	41	42	..	44.5
	Minimum	..	..	6	5	4	4	11	38	40	29	25	25	25	25	25	28	34	29	21	34	39	32	33	39	24	22	42	36	37	31	31	26.0
Marlinton	Maximum	42	22	12	10	22	28	32	44	50	30	34	32	32	32	26	32	30	31	18	44	36	40	36	32	44	32	36	46	38	42	50	34	33.5
	Minimum	22	6	− 6	2	− 2	− 2	20	30	28	20	14	16	10	14	12	26	14	10	4	30	30	28	30	32	20	20	30	24	12	18	16	17.0
Point Pleasant	Maximum	49	26	17	19	22	35	43	40	45	36	39	38	46	38	33	40	43	23	55	61	61	33	34	35	27	39	44	42	44	56	46	39.0
	Minimum	25	11	2	5	1	8	31	35	31	27	24	22	28	19	22	26	20	11	21	24	27	25	30	25	18	18	23	29	18	25	24	21.1
Powellton	Maximum	50	31	21	19	21	35	43	45	63	34	40	39	43	41	35	40	38	27	55	62	61	45	67	61	34	37	46	46	46	54	44	42.7
	Minimum	31	14	4	10	2	9	31	37	32	28	29	27	23	26	24	28	21	19	21	36	35	32	39	33	24	26	32	32	23	27	31	25.4
Robertsburg§	Maximum	35	24	17	17	19	36	40	41	48	39	37	40	43	27	36	47	27	25	55	65	37	34	36	34	26	41	47	35	50	57	39	37.2
	Minimum	26	11	1	4	− 4	− 4	4	32	35	27	23	20	20	21	21	24	26	14	13	24	31	24	27	33	20	20	21	29	18	20	27	19.6
Ryan	Maximum	38	35	20	18	25	36	40	43	56	36	37	37	37	35	36	35	40	22	55	64	64	33	48	46	28	41	45	39	45	56	36	39.4
	Minimum	35	6	− 8	0	− 9	− 1	29	35	32	27	19	20	16	17	16	27	22	14	20	28	29	27	31	28	19	19	20	26	14	19	25	19.4
Spencer §	Maximum	36	20	17	17	24	57	44	57	50	36	37	40	24	22	31	46	25	26	64	34	34	34	34	24	40	36	37	50	56	40	36	36.3
	Minimum	34	11	− 3	7	4	5	22	35	36	27	24	24	24	19	19	21	25	12	20	32	26	29	33	19	19	21	22	27	17	24	26	21.3
Sutton	Maximum	29	29	24	20	..	33	39	41	41	35	35	35	38	38	32	40	40	24	45	58	58	..	59	59	..	36	44	44	40	45	45	39.5
	Minimum	26	10	14	2	..	22	27	30	32	25	19	23	18	19	16	26	18	15	18	29	32	..	46	29	..	19	27	27	17	22	26	22 8
Union	Maximum	50	49	39	25	28	30	40	45	45	40	36	36	40	40	40	39	38	25	50	52	55	44	47	52	47	30	35	40	50	45	40	41.0
	Minimum	16	15	0	1	2	10	15	25	20	16	15	16	19	22	21	23	18	14	20	32	32	31	32	40	25	25	23	30	17	21	20	19.8
White Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Williamson§	Maximum	42	20	18	16	25	35	40	50	60	40	40	40	44	35	45	48	58	30	58	63	48	40	65	45	28	41	44	40	30	64	40	41.7
	Minimum	28	15	5	5	4	3	12	35	35	30	26	25	25	30	27	30	35	22	22	30	40	34	34	40	25	25	28	35	20	26	28	25.1

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO PRECIP
Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.
Based on 700 records.
L C.

rWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY
JAN 31 1920

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

FEBRUARY, 1920

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JUNE 14, 1920

Departure of the Mean Temperature from the Normal, February, 1920.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVIII. PARKERSBURG, W. VA., FEBRUARY, 1920. NO. 2

GENERAL SUMMARY.

February was somewhat colder than usual, with a deficiency in precipitation and sunshine. Although cold, the month was free from periods of unusually low temperatures. The precipitation was generally considerably deficient west of the crest of the Alleghenies, while over the eastern panhandle counties the normals were considerably exceeded, due to a heavy snowfall attending a storm that passed northward over the Atlantic states early in the month. The snowfall for the State was slightly above the normal. Owing to freezing and thawing weather, without much snow-cover, the conditions were unfavorable for winter grains over the western and southern counties. Some plowing was done early in the month, but the conditions were unfavorable for outdoor work during the last two decades. However, fruit buds were held back by the cold weather. The roads were in bad condition. The rivers were unusually low. Navigation was impeded in the Ohio River in the district on account of running ice from the 16th to the 21st and the 27th to the 29th.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.09 and 30 07 inches, respectively The highest and lowest readings observed were as follows: Parkersburg, 30.58 inches on the 2d, and 29.71 inches on the 17th. Elkins, 30.64 inches on the 2d, and 29.68 inches on the 24th.

TEMPERATURE.

The monthly mean for the State, 50 stations reporting, was 31.3°. The departure from the normal for 44 stations having ten or more years of record was — 1.0°. The temperatures were above the normal from the 1st to the 4th, 9th to the 12th, and the 21st to the 23d, with the highest readings occurring generally on the 2d. The coldest weather prevailed on the 15-16th, 19-20th, and from the 24th to the close of the month, with the lowest temperatures occurring generally on the 16th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 80 per cent; 8 p. m., 74 per cent. The February averages for the same hours for the past 30 years are 83 and 75 per cent, respectively. Elkins, 8 a. m., 86 per cent; 8 p. m., 77 per cent. The February averages for Elkins for the same hours for the past 19 years are 84 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 63 stations reporting was 2.71 inches. The departure from the normal for 44 stations having ten or more years of record was —0.36 inch. The precipitation was heaviest over the eastern panhandle and in sections of the central and southeastern counties. The falls were lightest in the western counties. Rain set in on the 3d, soon turning to snow in most districts, the snowfall over the eastern panhandle counties ranging from 8 to nearly 18 inches. The greater part of the precipitation after the 5th occurred on the 10th, 13th, 15th, 18-19th, 21st-22d, 24-25th, and 29th, falling as snow or rain until the 24th. There were light to moderate snows during the last four days. An exceptionally heavy sleet storm occurred in sections of Randolph County on the 6-7th.

WIND.

The average wind velocity at Parkersburg was 7.2 miles per hour, or 0.1 mile below the February average for the past 30 years. The average at Elkins was 6.6 miles per hour, or 1.1 miles above the February average for 21 years. The highest velocity at Parkersburg was 28 miles per hour from the west on the 14th, and at Elkins 26 miles per hour from the south on the 17th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 33 per cent of the possible amount, or 4 per cent below the February average for 22 years. The average at Elkins was 24 per cent, or 11 per cent below the February average for 20 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Brandywine, 24th; Elkins, 3d, 22d, and 23d; Evans, 21st and 22d; Glenville, 22d and 23d; Hinton, 23d; Kayford, 22d and 23d; Marlinton, 2d, 4th, 22d, and 23d; Philippi, 22d; Pickens, 22d and 23d; Raleigh, 24th; Romney, 3d and 9th; Wardensville, 22d and 23d; Wheeling, 3d; Williamson, 3d, 11th, 14th, 21st, and 28th.

Halos, lunar: Elkins and Parkersburg, 2d; Ryan, 3d.

Halos, solar: Elkins, 11th and 20th.

Haze, dense: Bayard, 19th.

Sleet: Bayard, 22d and 23d; Bens Run, 21st; Brandywine, 4th, Camden-on-Gauley, 8th; Holcomb, 6th; Marlinton, 10th and 21st; Martinsburg, 3d; Pickens, 6th; Smithfield, 4th, 8th, 13th, and 24th; Stony River Dam, 7th; Wheeling, 4th and 20th.

Smoke, dense: Lost Creek, 3d.

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	38.1	..	....	5.39	....	....	....	..	..	..
1892	37.1	72	—12	2.30	....	....	....	..	..	..
1893	35.0	71	— 6	4.81	6.70	1.65	....	..	..	..
1894	33.4	74	— 5	3.99	7.48	2.05	....	9	7	12
1895	22.8	79	—17	1.27	2.44	0.61	....	10	9	9
1896	33.4	62	— 5	3.31	6.23	1.50	....	7	8	14
1897	36.8	70	3	5.95	8.18	3.00	....	7	7	14
1898	32.7	74	—13	1.84	3.38	0.64	....	10	8	10
1899	26.1	69	—35	4.32	6.43	2.25	19.0	7	5	16
1900	30.7	83	—11	3.94	5.62	2.31	10.1	5	10	13
1901	27.1	62	— 6	0.86	1.66	0.10	4.1	8	8	12
1902	26.7	68	—14	3.20	5.65	1.33	8.1	6	7	15
1903	35.3	74	—19	5.99	9.59	2.58	8.6	10	6	12
1904	29.3	80	—13	2.37	4.55	0.52	8.1	12	9	8
1905	25.6	56	—22	2.34	4.65	0.80	8.1	8	6	14
1906	32.4	79	—11	1.69	3.34	0.46	8.1	15	6	7
1907	31.1	68	—23	2.55	4.83	0.67	11.1	9	8	11
1908	30.9	72	—10	3.72	6.26	1.77	15.8	7	8	14
1909	40.4	80	— 5	4.16	7.68	1.44	3 4	7	8	13
1910	31.5	72	—11	3.18	6 56	0.98	13.5	9	8	11
1911	38.7	76	— 6	2.03	3.92	0.40	4.8	8	8	12
1912	27.3	70	—17	2.45	5.08	0.72	6.4	10	8	11
1913	32.6	80	— 4	2.27	6.15	0.21	4.7	13	6	9
1914	28.4	70	—22	3.61	6.96	1.63	19.7	9	7	12
1915	38.4	72	— 2	3.07	5.33	0.90	3.6	19	5	13
1916	31.4	72	—12	4.30	9.19	1.79	13.2	8	6	15
1917	31.0	80	—14	3.29	7.73	1.26	10.1	9	7	12
1918	35.4	81	—19	3.12	6.60	0.45	3.8	11	6	11
1919	35.2	72	— 2	1.85	3.93	0.35	3.5	11	5	12
1920	31.3	69	— 4	2.71	5.49	1.49	9.3	7	5	17
Means and extremes ..	32.2	83	—35	3.19	9.59	0.10	9.0	9	7	12

Climatological Data for February, 1920.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	4	30.9	.....	60	2	5	16	38	2.63	.....	.....	15.0	9	13	5	11	s.	Elmer Keister.
Burlington	Mineral	875	26	29.6	− 0.7	50	18	7	16	34	2.40	+0.01	1.50	22.0	6	6	13	10	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	31	.....	.....	.....	.....	.....	.....	.....	2.47	−0.02	0.90	9.5	6	.....	.....	.....	e.	S. W. Lightner.
Martinsburg	Berkeley	435	28	28.8	− 1.3	49	18	8	16†	36	3.26	−0.15	.....	20.3	11	14	5	10	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	24	33.7	+ 1.6	58	2	13	1†	40	3.42	+1.13	1.50	18.5	9	21	3	5	.....	M. S. Henkel.
Piedmont	Mineral	919	7	29.4	.....	51	18	4	16	40	3.06	.....	1.11	.....	13	9	8	12	se.	C. A. Suter, Jr.
Romney	Hampshire	824	22	31.2	− 0.9	55	18	6	16	38	3.02	+0.80	....	16.0	10	4	9	16	.....	Geo. E. Arnold.
Stony River Dam	Tucker	.....	0	.....	.....	.....	.....	.....	.....	.....	2.76	.....	0.72	18.8	10	2	8	19	w.	A. C. Becker.
Upper Tract	Pendleton	1,230	21	30.4	− 2.0	50	1†	4	16	42	1.85	+0.17	0.60	12.6	7	8	8	13	w.	J. M. Mallow.
Wardensville	Hardy	1,200	2	32.0	.....	54	2	1	17	46	1.64	.....	1.15	17.0	5	7	11	11	w.	Luther F. Sutton.
Averages and	extremes	.....	....	30.8	− 0.7	60	2	1	17	46	2.65	+0.16	1.50	16.6	9	9	8	12	w.	
Northern Division.																				
Bens Run	Pleasants	622	18	32.4	+ 0.6	65	2	5	16	38	2.76	−0.45	0.65	7.0	11	12	7	10	.....	J. D. Riggs.
Brandonville	Preston	1,809	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	23	30.8	− 0.7	60	2	4	16	38	3.75	−0.10	0.70	14.0	14	5	5	19	.....	H. A. Darnall.
Cortland	Tucker	3,300	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	18	33.2	+ 0.5	64	2	5	16	39	2.98	+0.10	0.68	6.5	14	7	2	20	w.	J. M. Reed.
Davis	Tucker	3,093	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Branson Harper.
Elizabeth	Wirt	646	8	.....	.....	.....	.....	.....	.....	.....	2.53	.....	0.55	.....	13	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	19	28.8	− 2.8	63	2	0	16	39	3.10	−0.19	0.43	20.1	24	2	9	18	w.	U. S. Weather Bureau.
Fairmont	Marion	883	14	30.2	− 2.1	64	2	4	16	39	2.97	−0.04	0.75	9.5	13	8	2	19	w.	F. P. Hall.
Glenville	Gilmer	738	26	33.6	+ 0.9	69	2	4	16†	47	2.48	−1.28	0.68	5.0	13	5	9	15	w.	Howard R. Brannon.
Grafton	Taylor	1,000	27	31.4	− 0.2	63	2	3	16	41	3.20	−0.10	.....	7.0	15	3	10	16	e.	W. C. Byers.
Lost Creek	Harrison	1,026	22	32.4	+ 1.4	65	2	6	16	40	2.98	−0.02	1.01	5.5	10	6	2	21	w.	Allen Smith.
Mannington	Marion	974	17	30.9	− 0.1	64	2	4	16	41	3.49	+0.80	1.01	13.3	20	2	9	18	nw.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	27	28.7[a]	− 2.7	56[a]	3	2[a]	16	27[a]	.....	.....	.....	8.0	.....	3	3	23	.....	Prof. E. L. Andrews.
Moundsville	Marshall	642	17	32.0[a]	+ 0.5	64[a]	1	5	15	32[a]	1.77	−0.47	0.50	7.3	14	4	0	25	sw.	J. Z. Terrell.
New Cumberland	Hancock	987	22	27.6	− 0.1	57	2	2	16	34	2.01	−0.38	1.05	6.5	8	9	7	13	sw.	M. F. Smith.
New Martinsville	Wetzel	634	26	31.8	− 0.4	65	2	5	16	38	2.55	−0.45	0.80	.....	7	7	4	18	w.	Wm. Ankrom.
Parkersburg	Wood	638	33	32.1	− 1.9	60	2	6	16	29	2.16	−1.19	0.69	3.1	17	5	8	16	nw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	20	29.6	− 0.1	66	1	0	17	41	2.37	−1.10	1.36	10.0	6	4	7	18	.....	J. W. Swisher.
Philippi	Barbour	1,149	23	30.5	− 0.7	64	2	1	16	33	2.55	−0.84	0.65	10.1	15	8	4	17	w.	Prof. Vernon E. Wood.
Pickens	Randolph	2,697	17	27.2	− 4.6	57	2	− 2	16	37	5.49	+0.32	0.99	38.0	19	9	2	18	w.	Dr. J. L. Cunningham.
Rowlesburg ††	Preston	1,375	33	.....	.....	.....	.....	.....	.....	.....	3.53	+0.12	0.76	.....	17	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	11	.....	.....	.....	.....	.....	.....	.....	2.70	−0.54	0.70	6.4	14	.....	.....	.....	w.	Wm. Hughes.
Smithfield	Wetzel	835	14	29.4	− 1.3	60	2	3	16	37	3.69	+0.07	0.72	9.0	15	17	2	10	sw.	G. M. Whisler.
Terra Alta	Preston	2,612	19	25.1[b]	− 2.8	60	2	− 4[b]	16	35[b]	.....	.....	.....	.....	.....	4	2	23	w.	W. J. Grimm.
Wellsburg	Brooke	1,225	19	29.4	+ 2.0	56	2	4	16	32	1.49	−1.24	0.50	2.5	9	4	9	16	w.	George P. Pfister.
Weston	Lewis	1,026	24	32.2	+ 0.3	66	2	4	16	44	3.80	+0.07	0.97	12.0	22	3	7	19	ne.	Weston State Hospital
Wheeling	Ohio	645	33	29.8	− 0.1	67	2	5	16†	52	1.81	−0.74	0.43	3.4	11	4	9	16	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	30.4	− 0.7	69	2	− 4	16	52	2.80	−0.37	1.36	9.7	14	6	5	18	w.	
Southern Division.																				
Bancroft	Putnam	574	16	32.0	− 1.8	63	2	5	16	41	2.18	−0.78	0.48	7.8	14	9	0	20	nw.	R. E. Dent.
Beckley	Raleigh	2,440	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John A. Ewart.
Bluefield	Mercer	2,558	25	30.4	− 3.6	50	3	2	16	34	4.06	+1.05	1.00	14.0	17	6	4	17	.....	Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	5	.....	.....	.....	.....	.....	.....	.....	3.42	.....	0.82	10.0	11	4	1	24	n.	Miss Katie Jarvis.
Charleston	Kanawha	597	17	36.2	− 2.3	64	2	5	16	43	2.70	− 0.91	0.42	4.0	11	10	0	19	nw.	C. V. Lewis.
Clay	Clay	706	4	.....	.....	.....	.....	.....	.....	.....	2.07	.....	0.44	10.0	13	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	18	33.6	+ 0.8	68	2	5	16	40	2.22	−0.75	0.70	4.0	8	2	10	17	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	4	.....	.....	.....	.....	.....	.....	.....	2.03	.....	0.74	3.0	11	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	4	.....	.....	.....	.....	.....	.....	.....	2.54	.....	0.64	3.5	14	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	5	.....	.....	.....	.....	.....	.....	.....	2.19	.....	0.51	3.5	11	.....	.....	.....	ne.	Lockmaster.
Dam 26 O. R.	Mason	505	4	.....	.....	.....	.....	.....	.....	.....	2.20	.....	0.60	.....	9	.....	.....	.....	.....	U. S. Engineer Office.
Evans	Jackson	606	8	34.0	.....	56	2	5	16	24	2.58	.....	0.89	3.5	12	8	2	19	.....	B. F. Sayre.
Gary	McDowell	1,426	4	32.7[b]	.....	55[f]	14	6[b]	17†	37[b]	3.69	.....	0.90	2.5	14	7[a]	0[a]	20[a]	.....	U. S. Coal & Coke Co.
Gassaway	Braxton	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.19	.....	0.44	7.0	7	.....	.....	.....	.....	W. H. Gwinn.
Green Sulphur Spgs	Summers	1,600	24	32.1	− 0.3	54	2	4	16	39	4.39	+1.66	0.91	14.0	14	5	2	22	w.	H. A. Hays.
Hinton	..do	1,450	23	30.7[a]	− 3.4	55[a]	20	5	16†	43[a]	2.70	−0.36	0.78	1.5	11	3	0	26	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	8	30.2	.....	63	2	− 2	17	43	3.69	.....	0.77	14.3	21	3	0	26	.....	W. C. Williams.
Huntington	Cabell	538	26	33.4	+ 0.9	65	2	8	16†	38	2.22	−1.15	0.62	5.6	14	10	0	19	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	1	.....	.....	.....	.....	.....	.....	.....	2.25	.....	0.50	3.0	6	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	4	.....	.....	.....	.....	.....	.....	.....	2.76	.....	.....	7.0	16	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	20	30.4	− 1.6	52	2	2	16	36	2.44	−0.46	0.48	9.0	10	5	5	19	nw.	Geo. T. Argabate.
Logan	Logan	687	17	35.3	− 4.3	58	3	9	16	27	2.10	−2.19	0.43	3.8	8	11	0	18	.....	W. C. Flanagan.
Madison	Boone	704	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	21	26.4	− 2.8	48	2†	0	16	32	2.78	−1.64	0.76	5.0	10	0	11	18	nw.	S. L. Brown.
Point Pleasant	Mason	553	27	34.2	+ 0.7	65	2	5	16	37	2.25	−1.23	0.60	2.0	13	7	1	21	.....	W. D. Holmes.
Powellton [a]	Fayette	933	24	35.2	− 0.2	65	21	8	16	34	3.19	+0.15	.....	6.2	19	10	2	16	.....	Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	4	.....	.....	.....	.....	.....	.....	.....	3.02	.....	0.67	14.4	13	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	4	.....	.....	.....	.....	.....	.....	.....	1.59	.....	0.67	.....	5	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg [a]	Putnam	574	29	32.8	− 0.1	63	2	6	16†	40	2.05	−1.02	0.50	3.5	10	5	4	19	.....	E. C. Brace, Jr.
Ryan	Roane	709	17	31.6	− 1.7	65	2	0	27	44	2.99	−0.40	0.60	13.5	21	3	4	22	.....	Wm. E. Ryan.
Sissonville	Kanawha	625	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer	Roane	784	16	31.1	− 2.8	62	2	10	27	33	2.79	−0.26	0.73	5.0	8	2	8	19	.....	A. M. McKown.
Sutton	Braxton	839	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lawrence Freeman.
Union	Monroe	2,250	16	31.4	− 1.8	57	4	3	16	36	2.31	−0.43	0.90	7.0	8	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Ayres.
Williamson	Mingo	660	20	34.4	− 1.8	59	3	10	16†	35	2.69	−0.48	0.75	3.8	13	10	1	18	w.	J. F. Keyser.
Averages and	extremes	.....	....	32.4	− 1.5	68	2	− 2	17	44	2.65	−0.54	1.00	6.7	12	6	3	20	nw.	
State averages and	extremes	.....	....	31.3	− 1.0	69	2	− 4	16	52	2.71	−0.36	1.50	9.3	12	7	5	17	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[f] Approximated by the observer.

Daily Precipitation for February, 1920.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac			*	*	1.60							T.	.35								.08	.25	.05	.10				.20			2.63
Burlington	do			*	1.50								*	.30								.40				T.			.20			2.40
Harpers Ferry ‖	do	.10		.80		.90	.35				T.			.10									.22									2.47
Martinsburg	do			*	*	*	1.58				.50		.15		.10							.35		.05	.03					.50			3.26
Moorefield	do				.70	1.50	.10				.14			.35								.38	.02		.05				.18			3.42
Piedmont	do				1.11	.56		T.			.23		.02	.27	T.	.06			.02			.48	.10	.12	.02	.03	.04	T.	T.	T.			3.06
Romney	do			.40	*	1.20				*	.25				.60							.16		*	.33		.08		T.	T.			3.02
Stony River Dam ‖	do				.42	.72		T.			.24			.32		.10					.04	.42		.18			.16	.16	T.			2.76
Upper Tract	do				.50	.60								.25								.05	.30	T.	.10				T.	.05			1.85
Wardensville	do				1.15	.05								.20								.16			T.	T.				.08			1.64
Northern Division.																																	
Bens Run	Ohio				.65	.05					.50		.05	.08	.21				.25			.60		.22	T.	T.			.06	.09			2.76
Brandonville ‖	Monongahela																																
Buckhannon	do				.50	.05	.05		T.		.70		T.	T	.25	.30			.15	.05		.69	.12	.18	.15	.15				.50			3.75
Cortland ‖	Monongahela																																
Creston ‖	Little Kanawha				.60	.10		T.	T.	T.	.37			.24	T.	.02	.02		.08	.33		.13	.68		.05	.02	.04			.30			2.98
Davis ‖	Monongahela																																
Elizabeth ‖	Little Kanawha				.50	.18		.02			.29			.10		.07			.17			.35	.55		.03	.03	.01			.23			2.53
Elkins ***	Monongahela			.09	.15	.07	.08	.01	.03	.06	.37		.01	.22	.22	.23	.02	T.	.10	.02	T.	.35	.13	.19	.13	.15	.09	.02	.20	.16			3.10
Fairmont ‖	do				.58	.40	.10	T.	T.	T.	.31			.17		.12	T.	T.	.04	.16		.02	.75		.10	.02	T.	T.		.20			2.97
Glenville ‖	Little Kanawha				.68	T.	T.	.03			.37			.22		.18			.02	.16		.07	.36		.08	.05	.16		T.	.10			2.48
Grafton	Monongahela				*	.65							*	.45	*	.20			*	.35		*	.77	.10	.08	T.	.16		*	.44			3.20
Lost Creek	do				1.01	T.	T.		T.		.50		T.	.12	.03	.07			.09	T.		.71	T.	.09	T.	T.	T.		.04	.32			2.98
Mannington	do				1.01	.14	.06		.01		.40		.03	.17	.03	.14	.06		.31	T.		.61	.16	.09	.02	.03	.02	.02	.08	.10			3.49
Morgantown	do																																
Moundsville ‖	Ohio			.50	.12				.25				.02	.10	.03			.15	.10		.02	.12		.15	.04	.02			.15			1.77
New Cumberland	do				.20	T.		T.							.08	.04		T.	.12			1.05		.40		.04				.08			2.01
New Martinsville	do			.35		T.	T.				.50			T.	.20	T.			.30			.80	.20	.10		T	T.	T.	.10	T.			2.55
Parkersburg ***	Ohio				.48	T.		.05	T.	.19	.17		.04	.02	.05	.01			.17		.01	.68	.02	.08	.01	.06	T.		.08	.04			2.16
Parsons	Monongahela				.30	T.			T.				T.		.15	.16			1.36		T.	T.	T.	T.	.16	T.				.24			2.37
Philippi	do				.65	.07	.10	T.	T.		.08		.03	.10	.20				.08			.53	.08	.15	.10	.08	T.		.05	.25			2.55
Pickens	do			.32	.50	.10	T.	.10	.16	.99			.12	.24	.16	.40			.16			*	.48	*	.16	.48	.32		.16	.64			5.49
Rowlesburg ‖	do																																
Saint Marys ‖	Ohio				.44	.18		.03			.44			.14		.14			.08	.18		.06	.70	T.	.04		.03		.08	.16			2.70
Smithfield ‖	Fishing Creek				.72	.13			T.		.55			.22	.05	.15	.04		.17	.22		.20	.70		.12	.13	.05			.24			3.69
Terra Alta	Monongahela																																
Wellsburg	Ohio				.40	.10		T.			.06			.10	T.				.11			.50	.03	.15		T.	T.		.04	T.			1.49
Weston	Monongahela				.97	.01	.01	.02	.02		.48		.01	.15	.05	.30			.09	.05	.01	.50	.22	.07	.06	.20	.12	.06	.07	.33			3.80
Wheeling ‖	Ohio				.25	.30	T.	T.	T.		.19			.01		.14	T.		.03	.15			.43		.18		.04	T.	T.	.09			1.81
Southern Division.																																	
Bancroft ‖	Great Kanawha				.40				T.	.05	.15			.15		.10	.04			.15		.10	.48	.05	.03	.08	.03			.37			2.18
Beckley	do																																
Bluefield	do			1.00	.25	T.	T.				.20		.20	.10	.10	.08			.10		.32			.25	.20	.24	.24	.10	.20	.40	.08			4.06
Camden-on-Gauley ‖	do			.80		T.	T.		T.	.82				.08		.16			.08	T.		.16	.80		.20		.16	.08		.08			3.42
Charleston ‖	do				42	T.	T.	T.	T.		.18			.25	T.	.15	T.	T.		T.		.20	.40	.20	.10	.30	.10	T.		.40			2.70
Clay ‖	do				.20		.03	T	T.		.41			.23		.18		.03		.05		.05	.15	T.	.15	.11	.04			.44			2.07
Cuba	Sand Creek				.70		T.	T.	T.				.03	T.	T.	.04			.45			.60	.12	T.	T.		T.		.12	.16			2.22
Dam 19 O. R. ‖	Ohio				.47	.20			.05	T.				.07		.08	T.		.04			.20	.74		.06	T.	.04			.08			2.03
Dam 20 O. R. ‖	do				.60	.15		.03	T.		.29			.08		.01	T.	.13		.12		.18	.64	T.	.13	.01	.03			.14			2.54
Dam 22 O. R. ‖	do				.51	.12					.22			.04		.04			.20	.20		.25	.42		T.		.04			.15			2.19
Dam 26 O. R. ‖	do				.38	.11					.16			.05					.25	.28		.20	.60							.17			2.20
Evans	Ohio					.89			.05	T.			.05	.04	.03				.49	.03		.54	.11		.04	T.	T.		.03	.28			2.53
Gary ‖	Big Sandy			.02	.90			T.	T.		.44	.03		.46	T.	T.	.30			.08	.18		.85	.06	.19	.06	.08	.04	T.	T.			3.69
Gassaway ‖	Great Kanawha				.39		.44							.28	.16	.32				.30											.30			2.19
Green Sulpr. Spgs.	do			.31	.55	T.	T.	T.	T.				.21	.16	.34	.24			T.	.16		.42	.53	.91	.16	.08	.20			.12			4.39
Hinton ‖	do				.75				T.	.04	.28			.32		.04				.04		T.	.78	.04	.18	.12	T.	T.		.08			2.70
Holcomb	do			.06	.40		.04	.02	.04		.77		.08	.30	.12	.27	.05		.02	.07		.27	.16	.24	.08	.13	.20		.08	.29			3.69
Huntington ‖	Ohio					T.		.22	.02		.18			.16		.10	T.		.08	.18		.06	.56	.08	T.	.18	.06	.02		.32			2.22
Kanawha Falls ‖	Great Kanawha				.30	T.			T.		.59			.30	T.					T.	T.		.42	T.	T.	.38	T.			.35			2.25
Kayford ‖	do				.35		.02	T.	.13	T.	.47	T.		.28	T.	.30	.05		.05	.14	.02	.05	.34	T.	*	*	.51	T.		.05			2.76
Lewisburg	do			.19	.30						.48		T.	.36	T.	.08			T.			.28	.17	.22	.32	.04							2.44
Logan ‖	Guyandotte				.33			.25			.43			.33						.43	T.				.08		.15			.10			2.10
Madison	Great Kanawha																																
Marlinton	do			.48	.06	T.	T.	T.	T.		.58		T.	.40	.15	T.			.08	T.		.48	.28	.22	T.	.05	T.		T.	T.			2.78
Point Pleasant	Ohio			.54				.03			.12		.11	.06	.08				.25			.60	.10	.03	.06	.04	T.		T.	.23			2.25
Powellton	Great Kanawha			*	.45	T.		T.	*	*	.47		.07	.26	.04	.04	T.	.12	.06	.10		.40		.23	.05	.18	.24	.30	.18				3.19
Raleigh ‖	do				.45						.45	.10		.29		.16					.12		.67	.05	.10	.24	.09	.05		.25			3.02
Renick ‖	do				.40									.02	.25	.25							.67										1.59
Robertsburg ‖	do				.36			T.	T.		.14			.12		.14	T.		.05	.30		.15	.50	T.	T.		.05	T.		.24			2.05
Ryan	do				.50		.01	.04	.02		.23		.04	.21	.10	.09	.02		.15	.06		.60	.09	.11	.12	.08	.10	.01	.09	.32			2.99
Sissonville ‖	do																																
Spencer ‖	Little Kanawha				.68		T.	T.	T.	.33				.08					T.	.30	.08	.35	.73			T	T.	T.	T	.24			2.79
Sutton ‖	Great Kanawha																																
Union	do				.90						.25			.16	.10	.16						.25	.25			.24							2.31
White Sulphur Spgs.	do																																
Williamson ‖	Big Sandy				.20			T.	.03		.44			.30		.06	T.			.10	T.		.75	.04	.22	.10	.05	.10		.30			2.69

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for February, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	43	29	39	43	32	34	..	..	..	..	36	28	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28	14	11	28	28	28	20	11	6	0	12	12	..	..	....
Brandywine	Maximum	36	60	55	43	30	35	39	38	45	50	59	42	44	49	44	25	44	48	40	42	41	42	49	42	31	23	26	40	38	..	..	41.1
	Minimum	9	25	27	25	22	25	11	27	25	35	23	19	30	16	14	5	6	19	25	9	30	32	32	31	19	16	10	12	20	..	..	20.7
Burlington	Maximum	33	48	41	44	32	36	38	35	40	45	44	38	43	49	36	17	44	50	37	39	34	35	36	37	28	25	21	40	37	..	..	37.3
	Minimum	10	16	25	25	25	24	27	30	31	31	25	19	28	15	11	7	12	35	24	17	27	28	33	27	22	15	11	13	21	..	..	21.9
Martinsburg§	Maximum	26	39	41	32	31	38	37	37	40	45	45	38	44	47	23	23	44	49	34	39	31	38	35	36	31	26	26	39	33	..	..	36.1
	Minimum	10	11	25	27	26	24	24	30	30	31	31	26	26	21	17	8	8	22	24	15	18	25	29	32	21	18	11	12	22	..	..	21.5
Moorfield	Maximum	39	58	53	42	32	38	45	41	47	51	53	45	48	54	50	24	50	53	48	48	42	45	41	39	35	28	29	46	41	..	..	43.6
	Minimum	13	18	26	29	24	27	21	31	31	32	27	21	32	17	16	14	13	36	27	15	29	29	32	33	22	19	13	18	26	..	..	23.8
Piedmont	Maximum	32	49	43	42	33	34	35	36	39	43	46	39	43	50	32	15	47	51	36	41	36	37	34	37	29	23	22	40	35	..	..	37.2
	Minimum	9	19	29	25	24	26	27	29	30	31	32	21	32	20	10	4	7	35	20	13	27	28	32	28	20	9	8	11	23	..	..	21.7
Romney	Maximum	39	53	43	43	32	34	36	35	41	44	49	46	46	54	45	19	45	55	52	44	48	37	38	37	34	29	26	40	43	..	..	40.9
	Minimum	8	15	20	26	28	26	25	25	30	31	28	20	31	17	14	6	9	37	21	15	28	27	32	31	20	14	9	9	25	..	..	21.6
Upper Tract	Maximum	50	50	48	42	41	34	35	34	36	47	47	48	49	50	48	46	40	40	48	48	42	41	41	42	38	35	31	30	31	..	..	41.8
	Minimum	15	10	20	20	20	22	25	29	30	26	28	28	27	20	18	4	10	16	15	14	16	28	30	31	18	15	8	5	6	..	..	18.9
Wardensville	Maximum	44	54	50	43	35	37	38	35	41	50	53	40	47	49	47	19	47	50	43	43	35	36	38	37	32	25	25	41	38	..	..	40.4
	Minimum	16	12	23	30	25	24	25	28	28	30	23	31	29	31	12	4	1	24	35	27	25	26	29	28	25	19	22	22	28	..	..	23.5
Northern Division.																																	
Bens Run	Maximum	53	65	50	46	37	34	38	37	42	44	45	42	45	47	34	20	41	42	32	43	40	48	42	42	28	24	32	37	33	..	..	40.1
	Minimum	20	27	31	30	28	28	32	31	32	33	29	29	31	32	10	5	10	30	17	16	32	35	35	26	22	15	12	22	19	..	..	24.8
Buckhannon	Maximum	42	60	53	40	33	30	32	32	36	40	44	47	40	52	30	17	40	43	34	31	45	45	53	45	27	21	24	35	33	..	..	38.1
	Minimum	22	26	30	30	27	27	26	29	29	33	26	34	33	14	10	4	8	32	19	11	31	40	38	27	19	14	9	13	23	..	..	23.6
Creston	Maximum	54	64	60	51	48	34	39	37	42	45	45	47	44	50	35	20	42	42	34	44	46	48	47	45	29	24	30	34	34	..	..	41.9
	Minimum	19	25	29	36	29	28	30	34	31	34	23	24	30	24	12	5	7	32	21	12	33	38	38	29	21	16	10	20	22	..	..	21.6
Elkins	Maximum	50	63	52	42	33	26	30	29	38	43	44	43	36	49	20	14	40	45	29	38	43	45	50	38	20	16	19	36	29	..	..	36.6
	Minimum	24	24	28	31	24	23	24	26	18	33	30	24	23	17	4	0	14	28	17	12	30	39	37	20	16	8	5	9	12	..	..	21.0
Fairmont§	Maximum	55	61	51	36	32	35	36	33	38	42	45	50	40	51	16	22	41	39	30	41	44	41	44	33	26	21	26	38	34	..	..	38.1
	Minimum	17	25	26	31	25	25	27	29	30	31	31	26	30	27	12	4	5	22	16	15	18	34	35	32	20	15	9	12	22	..	..	22.4
Glenville	Maximum	58	69	66	53	38	34	37	37	41	48	47	48	47	53	35	21	44	44	39	46	47	48	48	46	30	25	30	38	42	..	..	43.4
	Minimum	17	22	27	37	28	27	29	31	29	34	21	23	31	23	12	1	4	33	20	10	33	40	38	29	21	14	10	14	26	..	..	23.7
Grafton	Maximum	54	63	54	51	34	32	34	34	37	42	45	49	41	61	34	17	42	38	33	40	43	44	43	44	27	35	42	37	33	..	..	40.8
	Minimum	20	22	26	30	24	25	26	28	29	32	29	35	31	24	9	3	13	16	14	11	32	35	30	25	18	12	7	15	21	..	..	22.1
Lost Creek	Maximum	55	65	62	52	33	30	34	34	38	45	46	49	42	52	36	16	42	42	33	43	45	45	45	45	27	24	25	37	32	..	..	40.5
	Minimum	15	28	30	32	29	29	28	29	30	36	32	23	32	23	12	6	11	33	18	16	32	33	38	27	20	15	10	17	22	..	..	21.3
Mannington	Maximum	55	64	51	49	32	32	35	34	36	42	43	47	39	50	35	16	41	40	32	40	40	43	43	42	27	23	27	35	33	..	..	38.8
	Minimum	18	23	28	32	25	26	25	29	30	33	30	25	32	25	10	4	9	32	15	12	31	35	35	26	20	15	9	11	21	..	..	23.0
Morgantown	Maximum	..	51	56	48	29	32	31	31	34	38	37	36	38	34	32	10	37	37	36	32	42	42	41	42	26	20	21	31	31	..	..	34.8
	Minimum	..	34	32	28	22	24	24	27	28	28	30	31	30	32	7	2	10	26	12	12	31	32	34	24	18	13	7	16	18	..	..	22.6
New Cumberland	Maximum	46	57	42	39	33	39	34	34	43	40	43	42	46	43	30	14	40	37	37	37	34	40	40	38	25	25	27	33	33	..	..	36.9
	Minimum	12	25	30	27	24	23	24	28	27	31	22	26	26	28	7	2	10	22	7	4	10	18	25	23	17	5	4	11	15	..	..	18.4
New Martinsville	Maximum	54	65	60	42	35	35	36	35	40	43	45	48	44	50	34	21	42	41	30	41	36	42	41	41	27	25	26	36	32	..	..	39.6
	Minimum	19	27	30	30	27	27	29	29	32	32	27	28	32	28	9	5	15	28	16	15	32	34	34	27	21	15	11	18	21	..	..	24.1
Parkersburg	Maximum	53	60	50	41	36	32	37	35	41	45	46	46	44	47	20	20	42	41	31	42	43	47	43	35	26	21	28	36	31	..	..	38.6
	Minimum	24	33	33	30	29	28	30	32	32	34	27	32	31	20	10	6	18	28	19	20	34	36	35	25	21	15	13	26	20	..	..	25.6
Parsons	Maximum	66	48	52	45	52	30	29	29	37	39	45	38	36	51	47	12	41	46	32	40	42	46	50	44	28	18	17	38	31	..	..	38.9
	Minimum	33	16	30	20	22	25	25	19	24	28	22	24	34	14	5	2	0	30	18	11	31	35	35	25	17	7	5	15	10	..	..	20.2
Philippi	Maximum	54	64	53	46	31	31	31	34	40	44	47	38	50	32	12	39	42	31	38	45	45	50	43	25	18	20	35	31	..	..	37.9
	Minimum	21	37	33	29	25	24	24	27	29	32	33	36	31	31	7	1	9	22	14	12	32	35	36	25	16	12	6	15	19	..	..	23.1
Pickens	Maximum	52	57	53	43	33	25	28	27	37	38	42	43	37	43	34	5	35	42	29	39	45	47	53	39	28	23	27	34	30	..	..	36.8
	Minimum	23	20	30	27	23	20	20	22	17	21	23	25	25	22	3	− 2	5	21	10	4	23	31	38	21	10	7	2	1	15	..	..	17.5
Terra Alta	Maximum	39	60	55	40	27	28	25	25	31	36	37	40	33	45	38	10	34	37	28	32	30	42	39	39	22	14	30	27	27	..	..	33.4
	Minimum	8	30	32	..	..	18	19	20	22	22	25	23	28	22	3	− 4	3	27	10	10	21	24	31	20	12	7	7	− 1	14	..	..	16.8
Wellsburg	Maximum	47	56	39	40	36	36	35	34	39	40	41	49	39	45	32	15	42	43	25	37	34	42	39	39	25	22	25	39	33	..	..	36.8
	Minimum	17	24	29	28	25	25	25	30	30	33	24	26	30	26	9	4	14	23	21	6	23	33	29	25	19	10	10	18	20	..	..	21.9
Weston	Maximum	55	66	53	38	35	33	34	35	37	44	46	48	42	51	35	15	41	44	35	41	46	47	48	45	30	22	25	36	33	..	..	40.0
	Minimum	20	22	29	33	27	27	28	30	31	34	27	27	32	26	11	4	12	32	20	14	33	39	38	27	20	15	10	17	23	..	..	24.4
Wheeling§	Maximum	32	67	42	36	35	39	37	35	40	44	47	50	45	48	14	24	45	40	32	42	35	44	40	35	25	20	29	35	35	..	..	37.8
	Minimum	22	15	21	32	27	27	25	30	30	33	25	26	30	30	10	5	5	24	14	13	19	30	32	29	22	14	9	14	20	..	..	21.8
Southern Division.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Bluefield	Maximum	42	49	50	45	35	29	29	30	44	44	44	42	43	42	42	19	37	36	35	..	..	40	38	28	29	23	25	38	38	..	..	36.9
	Minimum	15	22	39	34	27	24	25	27	30	38	27	29	32	27	8	2	13	34	25	..	..	35	25	28	19	12	8	16	25	..	..	23.9
Charleston	Maximum	54	64	56	50	49	42	40	40	47	45	50	53	43	52	46	38	45	60	55	58	59	54	49	49	39	32	39	37	35	..	..	47.6
	Minimum	31	29	29	37	30	30	30	30	31	30	26	26	32	27	14	5	9	25	26	15	18	38	40	32	23	19	11	12	14	..	..	24.8
Gary§	Maximum	..	..	..	..	..	33	34	35	49	50	50	40	47	55	21	23	42	43	35	53	45	51	53	44	33	25	29	..	44	..	..	40.5
	Minimum	..	..	..	..	..	..	29	31	32	32	26	26	30	26	14	11	6	6	29	19	20	34	42	37	35	25	14	..	..	..	..	24.9
Green Sulphur Spgs.	Maximum	39	54	50	50	40	33	34	34	41	50	50	39	45	52	38	22	43	41	37	50	39	50	50	48	32	21	27	42	39	..	..	41.0
	Minimum	16	25	29	38	30	27	27	30	29	33	21	22	32	20	11	4	5	27	25	11	29	38	41	30	19	14	10	9	20	..	..	23.2
Hinton§	Maximum	38	35	45	49	36	32	35	32	38	40	37	38	39	38	24	20	48	47	35	55	40	48	50	38	28	28	34	45	..	..	..	38.6
	Minimum	16	17	30	34	32	29	29	30	30	31	24	25	27	25	15	5	5	17	27	15	15	33	38	37	20	15	11	11	18	..	..	22.8
Holcomb	Maximum	44	63	53	47	41	29	30	31	39	41	45	45	36	53	33	14	41	44	32	43	45	48	53	46	28	20	23	37	34	..	..	39.2
	Minimum	22	26	29	36	27	25	24	27	26	33	23	24	30	20	8	2	− 2	27	22	2	22	39	36	26	16	13	6	4	18	..	..	21.1
Huntington§	Maximum	60	65	51	40	35	33	40	40	48	48	48	46	50	46	17	25	46	40	35	51	50	47	47	34	27	25	31	40	30	..	..	41.2
	Minimum	27	28	30	37	30	30	30	32	31	31	26	26	32	30	14	8	8	25	25	21	21	37	38	34	25	20	11	12	24	..	..	25.6
Lewisburg	Maximum	30	52	56	45	35	29	33	31	39	46	43	40	41	49	38	18	42	41	37	45	42	49	48	44	29	18	21	39	37	..	..	38.4
	Minimum	12	25	32	34	28	25	23	28	27	32	26	22	32	19	9	2	6	31	25	13	31	35	39	28	16	12	6	9	20	..	..	22.3
Logan§	Maximum	52	55	58	53	35	33	44	44	46	49	49	49	44	52	22	27	34	47	51	36	49	51	50	52	42	25	31	42	45	..	..	43.7
	Minimum	31	31	34	30	32	32	33	30	32	32	22	31	35	28	16	9	11	20	27	27	31	34	36	42	25	19	14	15	20	..	..	26.9
Marlinton	Maximum	30	48	46	36	32	26	30	30	36	40	42	34	46	42	28	12	36	36	34	38	36	48	42	40	26	16	20	32	30	..	..	34.2
	Minimum	8	30	28	28	24	22	20	24	26	28	22	18	22	12	6	0	8	30	16	6	28	32	34	22	12	8	4	6	16	..	..	18.6
Point Pleasant	Maximum	55	65	52	45	39	35	43	39	43	53	50	46	47	43	35	22	44	45	42	47	47	50	50	48	31	27	32	38	35	..	..	43.1
	Minimum	23	28	31	35	29	29	30	32	31	32	24	30	30	31	10	5	7	35	21	20	36	35	30	28	23	17	10	23	22	..	..	25.4
Powellton	Maximum	45	60	49	47	40	34	36	36	44	47	48	47	43	54	40	21	42	47	36	47	66	64	55	46	32	25	27	42	..	..	..	43.6
	Minimum	27	29	35	39	31	30	31	32	31	38	27	29	31	27	14	8	14	34	26	15	33	30	41	31	22	18	11	16	..	..	..	26.9
Robertsburg§	Maximum	58	63	51	41	35	33	40	39	40	47	47	46	48	48	16	26	46	46	34	47	47	47	46	..	34	27	30	41	28	..	..	41.1
	Minimum	26	27	30	31	30	29	29	31	31	31	24	24	30	28	14	6	6	24	23	18	20	36	36	32	..	23	11	12	23	..	..	24.5
Ryan	Maximum	53	65	51	48	36	33	38	37	41	45	47	45	45	55	31	20	40	40	38	45	45	47	46	43	39	25	28	30	30	..	..	40.6
	Minimum	23	21	27	36	28	27	30	30	29	34	19	21	30	22	10	2	3	31	22	12	33	40	39	30	20	13	0	11	12	..	..	22.6
Spencer §	Maximum	42	62	41	40	35	31	32	35	36	35	45	46	40	38	32	25	43	47	31	36	42	47	47	35	24	16	40	40	41	..	..	38.1
	Minimum	24	29	29	32	28	28	28	30	31	32	23	24	27	29	12	14	11	24	21	15	17	36	38	32	25	16	19	11	24	..	..	24.1
Union	Maximum	30	50	55	57	38	31	35	30	40	48	48	47	43	42	35	22	43	43	49	48	48	49	50	46	32	23	27	40	30	..	..	40.8
	Minimum	13	25	30	35	27	23	23	23	28	32	23	25	31	30	10	3	10	32	20	12	30	32	34	30	17	12	8	10	12	..	..	22.1
White Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Williamson§	Maximum	41	58	59	45	35	34	38	38	45	48	46	48	48	50	20	22	45	43	35	58	50	48	48	35	26	25	28	41	30	..	..	40.9
	Minimum	30	32	33	35	35	32	31	32	32	32	30	28	32	36	14	10	10	20	33	25	25	37	42	35	25	20	16	17	26	..	..	27.8

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches
4 to 6 inches.
Over 6 inches.

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MARCH, 1920

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JULY 19, 1920

Departure of the Mean Temperature from the Normal, March, 1920.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVIII. PARKERSBURG, W. VA., MARCH, 1920. No. 3

GENERAL SUMMARY.

The past month was exceptionally pleasant for March. While the temperature averaged normal, most of the month was seasonally warm. The precipitation was considerably below the normal and the amount of sunshine received was probably the greatest of March State record. Owing to pressure distribution, the temperatures were above the normal in practically all northern districts and below the normal in the southern districts. The month was characterized by continued brisk winds, making the average velocity probably the highest of State record for March, except in 1899, 1901, and 1913. The ground was free from snow during the greater portion of the month in the agricultural districts, and the conditions were somewhat unfavorable for winter grains. The month closed with fruit trees in excellent condition, the temperature not having been high enough to start the buds.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.06 and 30.07 inches, respectively The highest and lowest readings observed were as follows: Parkersburg, 30.55 inches on the 8th, and 29.33 inches on the 19th. Elkins, 30.55 inches on the 8th, and 29.32 inches on the 19th.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 42 8°. The departure from the normal for 40 stations having ten or more years of record was 0.0°. The month opened cold and the temperatures were much below the normal from the 5th to the 8th and somewhat below on the 13-14th, 17-18th, and 20th-21st, with the lowest readings occurring generally on the 1st and 8th. The warmest weather occurred on the 10-12th, 15-16th, and from the 23d to the close of the month, with the highest temperatures occurring generally on the 25th, 26th, and 28th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 67 per cent; 8 p. m., 53 per cent. The March averages for the same hours for the past 30 years are 80 and 69 per cent, respectively. Elkins, 8 a. m., 79 per cent; 8 p. m., 51 per cent. The March averages for Elkins for the same hours for the past 20 years are 83 and 70 per cent, respectively.

PRECIPITATION.

The monthly mean for the State, 63 stations reporting, was 3.38 inches. The departure from the normal for 43 stations having ten or more years of record was —0.51 inch. There were four well-marked periods of precipitation, as follows: From the 5th to the 7th, 11th to the 13th, and on the 16-17th and 19-20th, the greatest amounts being recorded on the 5th and 19th. Light snow or snow flurries occurred from the 5th to the 8th and on the 13th and 20th.

RIVERS.

Owing to warm weather, attended by moderate rains, which caused the snow to melt rapidly in the Pittsburgh district, the Ohio River was near or somewhat above the flood line in the district from March 13 to March 23 The following crest stages, in feet and tenths, were noted: Wheeling, 37.3; Saint Marys, 34.5; Mariotta, 34.8: Parkersburg, 35.4; Dam 19, 36.0; Dam 20, 36.2; Dam 22, 38.9; Point Pleasant, 45.0; Huntington, 49.1.

WIND.

The average wind velocity at Parkersburg was 8.8 miles per hour, or 1.6 miles above the March average for the past 30 years. The average at Elkins was 8.0 miles per hour, or 2.4 miles above the March average for 21 years. The highest velocity at Parkersburg was 46 miles per hour from the west on the 12th, and at Elkins 31 miles per hour from the southeast on the 4th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 62 per cent of the possible amount, or 22 per cent above the March average for 22 years. The average at Elkins was 59 per cent, or 21 per cent above the March average for 21 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Elkins, 3d, 11th, and 23d; Rowlesburg, 11th and 22d; Wheeling, 3d, 15th, 22d, 23d, and 24th.

Hail: Parkersburg, Robertsburg, and Wellsburg, 12th; Terra Alta, 19th.

Halos, lunar: Parkersburg, 31st; Pickens, 25th; Wheeling, 2d.

Halos, solar: Elkins, 4th, 8th, 15th, and 31st; Parkersburg, 31st.

Sleet: Holcomb. 10th; Wardensville, 5th.

Thunderstorms (dates and number of stations reporting): 12th, 12; 19th, 6; 20th, 1; 26th, 2; 28th, 1.

An aurora was observed generally throughout the state during the evening of the 22d and early morning of the 23d.

COMPARATIVE DATA FOR MARCH.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	34.9	..	....	4.91	....	....	....	..	..	..
1892	36.4	87	8	3.50	....	....	....	..	..	..
1893	40.7	84	3	1.49	2.89	0.89	5.2	8	8	15
1894	45.3	88	1	1.94	3.05	0.74	1.9	15	9	7
1895	39.6	90	0	3.05	4.75	0.89	7.9	11	9	11
1896	36.1	76	—10	4.45	8.40	1.76	....	10	8	13
1897	46.1	81	12	3.69	6.52	1.33	....	9	10	12
1898	48.5	86	9	5.43	10.05	1.25	T.	8	9	14
1899	42.5	76	0	5.82	8.48	2.40	4.5	7	9	15
1900	38.5	78	— 5	3.79	6.48	2.18	14.7	7	9	15
1901	42.9	83	—11	3.23	5.27	0.90	2.3	8	8	15
1902	43.4	89	— 5	4.30	6.29	3.00	15.0	10	9	12
1903	51.3	87	13	4.47	6.59	2.70	0.2	10	9	12
1904	43.8	86	7	4.12	6.10	1.38	1.9	9	8	14
1905	46.6	88	— 2	4.10	6.46	1.45	0.7	14	7	10
1906	37.3	75	— 7	4.77	8.11	1.98	13.4	7	6	18
1907	49.6	94	2	4.77	8.18	1.05	4.2	12	8	11
1908	47.8	89	15	6.04	8.60	1.23	1.1	11	8	12
1909	40.8	83	10	3.38	8.66	1.10	4.7	9	10	12
1910	49.5	90	5	0.55	2.25	0.04	1.1	18	9	4
1911	46.5	90	— 5	3.30	7.86	1 12	5.2	11	8	12
1912	39.9	80	6	5.02	9.36	1.78	5.1	8	7	16
1913	45.7	89	— 3	4.53	7.90	1.77	2.7	11	9	11
1914	37.3	83	—13	3.03	7.11	0.89	17.7	10	8	13
1915	34.4	63	7	1.61	4.32	0.53	6.7	12	7	12
1916	38.5	88	— 4	4.88	9.88	2.49	9.0	11	7	13
1917	41.9	85	— 3	6.58	14.20	3.10	11.6	14	4	13
1918	46.5	85	9	4.26	9.37	1.55	0.1	16	5	10
1919	44.5	81	12	2.92	4.81	1.60	0.8	16	6	9
1920	42.8	83	— 5	3.38	8.87	1.40	3.1	17	5	9
Means and extremes ..	42.5	91	—13	3.81	14.20	0.04	5.4	11	8	12

Climatological Data for March, 1920.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	19	38.4	+ 0.8	74	26	3	8	46	3.47	−0.04	1.33	17.5	12	11	11	9	w.	G. C. Dixon.
Brandywine	Pendleton		4	42.4		74	26	− 3	1	45	2.70		0.90		5	22	3	6	s.	Elmer Keister.
Burlington	Mineral	875	26	42.3	+ 1.2	76	26†	12	1†	45	2.75	−0.32	1.10	T.	4	17	12	2	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	31								1.40	−1.70	0.65	1.5	5				w.	S. W. Lightner.
Martinsburg	Berkeley	435	28	43.2	+ 2.0	77	29	14	6	42	3.17	−0.06		1.5	7	22	1	8	s.	G. W. Van Metre, C. E.
Moorefield[b]	Hardy	900	24	45.6	+ 1.8	80	26	8	1	47	2.47	−0.23	0.83	T.	6	26	3	0		M. S. Henkel.
Piedmont	Mineral	919	7	42.8		79	26	12	1†	44	2.05		0.73	6.0	5	23	4	4	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	22	45.0	+ 2.5	81	26	11	6†	48	2.35	−0.79	1.05		6	18	8	5		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	21	37.6	− 5.5	66	22†	5	1	41	2.30	−0.25	0.80		5	18	4	9	s.	J. M. Mallow.
Wardensville	Hardy	1,200	2	43.9		76	31	6	8	42	2.31		0.95		8	19	8	4	w.	Luther F. Sutton.
Averages and	extremes			42.4	+ 0.5	81	26	− 3	1	48	2.50	−0.48	1.10	4.4	6	20	6	5	w.	
Northern Division.																				
Bens Run	Pleasants	622	18	44.8	+ 1.6	80	25†	11	1	44	2.85	−1.36	0.78	4.0	9	19	9	3		J. D. Riggs.
Brandonville	Preston	1,809	9																	W. H. Miller.
Buckhannon	Upshur	1,411	23	41.8	+ 0.2	76	26	11	1†	42	4.03	−0.57	1.45	3.0	7	23	0	8		H. A. Darnall.
Cortland	Tucker	3,300	4																	Samuel Harmon.
Creston	Wirt	701	18	44.2	+ 0.3	79	28	1	1	47	3.55	−0.49	1.17	1.3	9	17	3	11	sw.	J. M. Reed.
Davis	Tucker	3,093	11																	Branson Harper.
Elizabeth	Wirt	646	8								3.28		1.18		10					E. D. Ball.
Elkins	Randolph	1,947	19	40.3	+ 1.2	72	26	7	8	43	4.57	+0.50	1.73	9.1	12	11	9	11	w.	U. S. Weather Bureau.
Fairmont	Marion	883	14	42.6	+ 0.9	81	25	5	1	49	2.66	−0.18	0.64	2.0	12	21	2	8	w.	F. P. Hall.
Glenville	Gilmer	738	26	46.0	+ 1.8	81	25†	2	1	55	3.13	−1.15	1.00	2.0	12	20	2	9	w.	Howard R. Brannon.
Gratton	Taylor	1,000	27			80	25†				3.13	−0.84			8	13	12	6	e.	W. C. Byers.
Lost Creek	Harrison	1,026	22	43.2	+ 0.5	79	28	0	1	52	4.06	−0.03	1.51	2.0	7	18	5	8	w.	Allen Smith.
Mannington	Marion	974	17	43.1	+ 0.2	78	25	3	1	48	3.12	−0.66	0.66	4.6	11	16	5	10	w.	Jas. A. Morgan.
Morgantown ††	Monongalia	1,250	27	38.7°		65°	16	9	1†	37°										Prof. E. L. Andrews.
Moundsville	Marshall	642	17	44.8	+ 1.8	80	28	8	1	48	2.51	−0.80	0.75	2.0	9	12	10	9	sw.	G. W. Wright.
New Cumberland	Hancock	987	22	41.6	+ 1.7	76	25†	8	1	57	3.59	+0.24	1.80	3.0	6	12	6	13	sw.	M. F. Smith.
New Martinsville	Wetzel	634	26	44.6	+ 1.1	80	28	7	1	48	2.75	−0.93	0.75	T.	7	19	4	8	s.	Wm. Ankrom.
Parkersburg	Wood	638	33	45.2	+ 3.1	76	28	14	6	36	2.92	−0.90	0.98	0.9	11	13	11	7	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	20	39.9	0	78	25	− 5	1	50	3.65	−0.42	2.00	4.0	4	17	5	9		J. W. Swisher.
Philippi	Barbour	1,149	23	43.6	+ 1.2	75	26†	8	1	39	3.56	−0.70	1.15	2.6	9	16	7	8	w.	Prof. Vernon E. Wood.
Pickens	Randolph	2,697	17	39.8°	+ 0.1	72°	26	− 1°	8	39°	3.33	−2.60	0.80	23.0	9	14[b]	6[b]	9[b]	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	33								4.01	−0.30	0.94		11				w.	J. F. Pierce.
Saint Marys	Pleasants	577	11								3.27	−0.39	0.73	1.2	10				sw.	Wm. Hughes.
Smithfield	Wetzel	835	14	40.6	− 1.1	74	26†	− 2	1	47	2.87	−1.17	0.90	4.1	11	23	3	5	sw.	G. M. Whisler.
Stony River Dam	Tucker		0	41.2[a]		70[a]	24	2	8	36[a]	2.91		0.64	4.8	7	12	7	12	w.	A. C. Becker.
Terra Alta	Preston	2,612	19	37.9[a]	− 1.1	72[a]	26	3[a]	6	41[a]						17	4	10	w.	W. J. Grimm.
Wellsburg	Brooke	1,225	19	42.2	+ 3.1	78	25†	8	1	50	2.06	−1.27	0.61	T.	5	19	5	7	w.	George P. Pfister.
Weston	Lewis	1,026	24	44.6	+ 0.8	77	28	9	1	45	3.74	−0.75	1.28	4.6	10	14	7	10	ne.	Weston State Hospital
Wheeling	Ohio	645	33	43.1	+ 2.1	82	25	12	1†	50	2.30	−0.78	0.70	1.1	11	13	14	4	w.	Miss M. B. Forsyth.
Averages and	extremes			42.6	+ 1.0	82	25	− 5	1	57	3.24	−0.71	2.00	3.8	9	16	6	9	w.	
Southern Division.																				
Bancroft	Putnam	574	16	42.9	− 1.7	77	25	7	1	44	3.20	−0.78	1.17	3.2	13	16	0	15	nw.	R. E. Dent.
Beckley	Raleigh	2,440	20																	John A. Ewart.
Bluefield	Mercer	2,558	25	43.2	− 1.2	66	18†	4	8	44	3.88	−0.23	0.55	8.5	16	14	9	8		Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	5								3.94		1.00	9.0	9	13	0	18	n.	Miss Katie Jarvis.
Charleston	Kanawha	597	17	44.6	− 4.4	80	28	12	1†	45	3.95	−0.46	1.10	T.	10	18	0	13	n.	C. V. Lewis.
Clay	Clay	706	4								2.97		1.17	2.5	7					Prof. E. H. Knabenshue.
Cuba	Jackson	650	18	45.6	− 1.4	82	25	0	1	47	3.83	−0.14	1.10	2.0	8	11	14	6	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	4								3.27		1.02	0.9	10					Lockmaster.
Dam 20 O. R.	Wood	551	4								3.98		1.30	0.9	9					Lockmaster.
Dam 22 O. R.	Jackson	538	5								3.80		1.05	0.8	9				sw.	Lockmaster.
Dam 26 O. R.	Mason	505	4								3.20		1.10		8					U. S. Engineer Office.
Evans	Jackson	606	8	44.6		75	25†	11	1	45	3.06		1.09	T.	6	15	3	13		B. F. Sayre.
Gary	McDowell	1,426	4	42.2[a]		72	25†	10[a]	9	42[a]	3.82		1.20	T.	9	16[a]	0[a]	14[a]		U. S. Coal & Coke Co.
Gassaway	Braxton										3.01		1.41	2.0	4					W. H. Gwinn.
Green Sulphur Spgs	Summers	1,600	24	43.2	− 0.2	74	27	4	8	44	8.87	+4.99	2.31	3.0	11	14	4	13	w.	H. A. Hays.
Hinton	..do	1,450	23	42.6	− 1.7	76	27	6	8†	52	3.92	−0.13	1.26	T.	11	13	3	15	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	8	40.7		72	26	− 2	8	43	4.82		1.24	7.8	11	14	7	10		W. C. Williams.
Huntington	Cabell	538	26	45.4	+ 0.8	83	25	11	8	48	2.96	−1.39	1.44	1.0	11	20	0	11	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	1								2.42		0.87	T.	5					J. O. Brown.
Kaylord	Kanawha	1,335	4								4.00		1.14		13					Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	20	40.6	− 2.0	71	26	4	8	41	3.35	−0.75	1.74	T.	8	15	5	11	s.	Geo. T. Argabate.
Logan	Logan	687	17																	W. C. Flanagan.
Madison	Boone	704	14																	S. E. Bradley.
Marlinton ††	Pocahontas	2,131	21	34.8	− 3.9	66	26	− 2	8	44	5.04	+0.71	2.08	0.5	11	10	10	11	sw.	S. L. Brown.
Point Pleasant	Mason	553	27	46.8	+ 1.5	80	25	11	8	43	3.75	−0.39	1.13	T.	9	11	6	14		W. D. Holmes.
Powellton [a]	Fayette	933	24	45.0	− 0.7	78	26†	8	8	43	4.45	−0.19	1.18	5.1	12	20	4	6		Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	4								5.01		1.28	2.0	14					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	4								3.86		1.70		7					Wm. B. Hill.
Robertsburg	Putnam	574	20	42.4[a]	− 2.4	79[a]	25	7	1	45[a]	3.25	−0.87	1.16	1.0	9	16[a]	2[a]	12[a]		E. C. Brace, Jr.
Ryan	Roane	700	17	42.4	− 1.6	77	25†	0	1	50	3.12	−1.27	0.94	2.9	10	17	4	10		Wm. E. Ryan.
Sharples	Kanawha		0								3.40		1.35		10					C. E. Rippetoe.
Sissonville	Kanawha	625	4																	J. N. Johnson.
Spencer ††	Roane	784	16	43.3	+ 0.4	80	28	4	1	51	3.64	−0.31	0.96	1.0	8	7	15	9		A. M. McKown.
Sutton	Braxton	839	14																	Lawrence Freeman.
Union	Monroe	2,250	16	41.6	− 1.5	81	24†	6	8	51	2.70	−1.05	1.25		5					Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	10																	J. M. Ayres.
Williamson	Mingo	660	20	42.9	− 4.1	75	25	10	8	40	4.30	−0.32	1.65	0.6	12	17	5	9	w.	J. F. Keyser.
Averages and	extremes			43.3	− 1.5	83	25	− 2	8	52	3.80	−0.21	2.31	2.2	10	15	4	12	w.	
State averages and	extremes			42.8	0	83	25	− 5	1	57	3.38	−0.51	2.31	3.1	9	17	5	9	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[a] Approximated by the observer.

Daily Precipitation for March, 1920.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac					.58	.08	.12				.08	.31	.39	.16		.31	1.02			.36	.04					.02						3.47
Brandywine	do					.75						T.	.32	.38			T.	.35		.90												2.70
Burlington	do					1.10						T.		.60			.15			.90	T.											2.75
Harpers Ferry ‖‖	do				T.	.65	.20					T.		.25	.10			.20			T.						T.					1.40
Martinsburg	do				*	1.48							.21	.57			.07			.81							.03					3.17
Moorefield	do					.83						T.		.50		.06				.80	.08						.20					2.47
Piedmont	do					.73	T.	T.				T.	T.	.18	T.		.28			.60	.26						T.		T.			2.05
Romney	do				*	1.05						T.	T.	.75			.05			*	.50											2.35
Upper Tract	do					.60							.40	T.	T.		T.	.10		.80	.40											2.30
Wardensville	do					.20						*	.13	.55			.06			.95	.07						.35					2.31
Northern Division.																																	
Bens Run	Ohio	.03				.68		.08				.20	.15	.15			.68			.78	.10											2.85
Brandonville ‖‖	Monongahela																																
Buckhannon	do					1.00	.30					.20	.20				.48			1.45	.40											4.03
Cortland ‖‖	Monongahela																																
Creston ‖‖	Little Kanawha	T.				.67		.06				.22	.20	.24	T.		.05	.64		1.17	.30	T.										3.55
Davis ‖‖	Monongahela																																
Elizabeth ‖‖	Little Kanawha					.55	.05	.01				.18	.14	.28			.08	.64		1.18	.17											3.28
Elkins ***	Monongahela	T.			.03	.46	.04	.03	T.		.01	.07	.73	.77			.44			1.73	.25					T.	.01					4.57
Fairmont ‖‖	do					.48	.04	.02	T.			.09	.10	.44	.08		.09	.55		.55	.20	.02					T.					2.66
Glenville ‖‖	Little Kanawha					.38		.04	.03			.16	.14	.42	.04		.22	.35		1.00	.33						.02					3.13
Grafton	Monongahela					.48		T.				*	*	.98			*	.55		*	1.12											3.13
Lost Creek	do					.82	T.	T.				.16	.08	.75	T.		.58	T.		1.51	.16											4.06
Mannington	do					.57	.01	.04				.10	.30	.43	.06		.64	.03		.66	.28						T.					3.12
Morgantown	do																																
Moundsville	Ohio	.04				.75		.04				.20	.20	.08			.50			.45	.25											2.51
New Cumberland	do						1.80	.21						.20			.75			.55	.08											3.59
New Martinsville	do					.75	.10	T.				.30	.20	T.			.60			.70	.10											2.75
Parkersburg ***	Ohio				.54	.06	T.	.02			.18	.07	.17	.06			.79		.02	.97	.04					T.			T.			2.92
Parsons	Monongahela					.08	T.	T.				1.33	T.	.24			2.00															3.65
Philippi	do					.67	.01	T.				.06	.11	.66	T.		.40	.15		1.15	.35											3.56
Pickens	do					.25	.16	.16				.19	.52	.80						.75	.35						.15					3.33
Rowlesburg ‖‖	do					.55	.12		.05				.18	.52	.22			.60		.74	.94	.06					.03					4.01
Saint Marys ‖‖	Ohio					.70		.03	T.			.18	.08	.40	.05		.05	.70		.73	.35											3.27
Smithfield ‖‖	Fishing Creek					.90	.01	.11				.05	.12	.58			.05			.68	.29						.03	.05				2.87
Stony River Dam ‖‖						.52	.06							.40			.64			.44	.62	.23	T.									2.91
Terra Alta	Monongahela																																
Wellsburg	Ohio					.61		T.					.23	T.			.60			.40	.22											2.06
Weston	Monongahela					.43	T.	.10				.14	.12	.83			.42	.14		1.28	.27	.01										3.74
Wheeling ‖‖	Ohio					.70	T.	.02	T.			.12	.11	.27	.03	T	.07	.42		.18	.33	T.					T.			.05		2.30
Southern Division.																																	
Bancroft ‖‖	Great Kanawha	.01				.49	T.	.07	.02			.22	.12	.26	.07		.05	.61		1.17	.10						.01					3.20
Bluefield	do	.20	.10			.30	.08	.05	.15	.10	.55		.45	.35	.20	.30	.10			.35	.20						.40					3.88
Camden-on-Gauley ‖‖	do					.16	.16	.16	.08	T.	.22		1.00	.16		T.	1.00			1.00	T.	T.										3.94
Charleston ‖‖	do					.30	T.	.20	T.			.49	.20	.70	T.		.10	.60		1.10	.10	.25										3.95
Clay ‖‖	do	T.				.25	.05		.20			.30	T.					.66		1.17	.34	T.										2.97
Cuba	Sand Creek					.75		.08				.30	.05	.75			.70			1.10	.10						T.		T.			3.83
Dam 19 O. R. ‖‖	Ohio					.45		.02	T.			.21	.14	.26	T.		.12	.70		1.02	.30	T.								.05		3.27
Dam 20 O. R. ‖‖	do					.70		.02	T.			.30	.14	.25	T.		.12	.83		1.30	.32											3.98
Dam 22 O. R. ‖‖	do					.70	.03	T.				.30	.12	.40		T.	.50	.60	T.	1.05	.10											3.80
Dam 26 O. R. ‖‖	do					.60						.40	.20	.20			.10	.50		1.10	.10											3.20
Evans	Ohio					.64	T.					.31	.19	.11			.72			1.09	T.											3.06
Gary ‖‖	Big Sandy					.35		T.	T.	T.	.06	.10	.40	1.20	T.			.51		.80	.35	T.					.05					3.82
Gassaway ‖‖	Great Kanawha					.20							1.22			.18				1.41												3.01
Green Sulpr. Spgs.	do					.65	T.	T.			.49	.42	1.23	1.91	.12		.64	.48		2.31	.47								.15			8.87
Hinton ‖‖	do					.30	T.	T.	T.		.02	.06	.24	.94	.04		T.	.50		1.26	.42	T.					.08			.06		3.92
Holcomb	do					.71	.02				.16	.07	.41	.89			.23	.49		1.24	.51						.09					4.82
Huntington ‖‖	Ohio					.54	T.	.04	.04			.28	.18	.22	T.		.12	T.		1.32	.12	T.					.02			.08		2.96
Kanawha Falls ‖‖	Great Kanawha					.20	T.	T.			T.		.25	.85						.87	.25											2.42
Kayford ‖‖	do	.25				.38	*	.08	.04		*	*	.45	1.14	.15		T.	.62		.53	.36	T.								T.		4.00
Lewisburg	do					.31						.22	.46	.25			.22			1.74	.10						.05		T.			3.35
Logan ‖‖	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do					.74	T.	T.			.16	.29	.84	.05			.42		.22	1.62	.46						.14			.10		5.04
Point Pleasant	Ohio				.02	.64	T.	T.				.48	.12	.26			.98	.02		1.13	.10											3.75
Powellton	Great Kanawha	*	.34			.46	T.	.03	T.		T.	.10	.27	.93	.14		.38	.26		1.18	.30	T.										4.45
Raleigh ‖‖	do	.05				.48	.08				.05	.10	.27	.96	.16		.13	.87		1.28	.30	T.					.20			.08		5.01
Renick ‖‖	do					.46						T.	.73	.30				.52			1.70						.10			.05		3.86
Robertsburg ‖‖	do	T.				.70		.08	T.			.26	.17	.30	T.		.08	.50		1.10	.06											3.25
Ryan	do				.04	.50	T.	.06			.26	.03	.18	.46			.53			.94	.12						T.		T			3.12
Sharples ‖‖	Coal River					.03	.03	T					.40	.60	.15		.04	.52		1.35	.25						.03					3.40
Sissonville ‖‖	Great Kanawha																																
Spencer ‖‖	Little Kanawha							T.	T.		.50	.62	.21	.08	T		.61	.47		.96	.19	T.										3.64
Sutton ‖‖	Great Kanawha																																
Union	do											.25	.50	.40			.30			1.25												2.70
White Sulphur Spgs.	do																																
Williamson ‖‖	Big Sandy	T.				.25	.03	.02	T.		T.	.12	.55	.65	.04		.12	.72		1.65	.10									.05		4.30

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement

T. Trace, or less than 0.01 inch.

‡‡‡ Probably incomplete.

Daily Temperatures for March, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	28	45	49	44	41	16	14	29	44	49	52	65	52	32	62	56	52	51	49	39	43	55	67	66	70	74	63	69	67	71	72	51.3
	Minimum	12	20	8	31	16	4	7	3	20	35	33	40	17	13	20	45	42	34	29	21	21	19	27	29	29	43	29	23	35	40	45	25.5
Brandywine	Maximum	40	47	55	52	44	30	25	39	52	60	63	65	62	40	64	63	60	61	56	50	45	65	69	68	70	74	70	69	73	70	71	57.2
	Minimum	− 3	17	18	24	25	13	12	5	21	27	37	35	26	22	24	48	38	27	39	25	23	20	24	25	29	52	48	27	53	40	34	27.6
Burlington	Maximum	36	47	51	52	41	24	27	37	50	55	64	70	55	39	58	62	56	51	42	43	63	63	70	68	71	76	68	70	76	65	74	55.6
	Minimum	12	21	18	24	19	14	16	12	29	27	34	39	30	21	21	32	40	30	35	33	23	24	25	25	31	42	50	27	49	44	50	29.0
Martinsburg§	Maximum	40	46	48	41	43	26	28	37	50	60	65	67	36	41	55	61	59	52	40	39	55	66	72	69	71	75	72	67	77	65	76	54.8
	Minimum	17	22	25	26	35	14	15	15	18	31	39	42	35	24	25	28	47	32	34	33	30	28	30	31	34	47	51	36	44	46	44	31.5
Moorfield	Maximum	45	55	59	56	53	29	30	43	52	62	67	74	66	60	65	..	62	58	52	49	58	71	..	76	79	80	74	72	78	68	78	61.1
	Minimum	8	13	20	28	27	15	11	9	21	27	35	49	30	24	22	..	44	32	35	38	25	24	..	31	33	54	50	29	57	42	39	30.2
Piedmont	Maximum	35	50	53	52	43	23	25	35	49	56	62	73	55	37	56	55	53	56	44	41	51	66	73	69	73	79	67	68	72	63	76	55.2
	Minimum	12	25	19	26	21	12	14	12	26	28	36	40	26	21	23	34	36	31	31	30	28	27	29	30	35	54	49	51	49	44	43	30.4
Romney	Maximum	39	52	54	53	43	27	28	39	54	62	68	73	65	41	62	65	60	58	52	45	60	66	75	75	73	81	72	70	77	67	78	59.2
	Minimum	15	23	20	28	23	11	15	11	28	27	35	43	30	23	21	45	43	30	31	31	38	23	32	27	35	50	29	30	53	50	51	30.7
Upper Tract	Maximum	39	42	50	48	46	26	22	40	50	53	58	60	57	38	40	54	55	51	40	33	60	66	66	66	66	65	64	62	60	64	65	51.8
	Minimum	5	18	18	22	24	11	11	7	20	27	30	33	23	21	23	24	23	23	29	28	23	25	25	25	26	27	27	28	29	30	37	23.3
Wardensville	Maximum	41	48	53	49	43	28	25	37	52	62	55	62	65	56	57	60	62	59	59	45	44	59	65	67	70	63	58	59	65	53	76	54.3
	Minimum	31	15	35	17	27	21	15	6	30	20	35	40	50	30	35	41	41	24	43	36	30	21	24	58	53	53	48	25	50	44	42	33.5
Northern Division.																																	
Bens Run	Maximum	37	47	59	59	51	22	24	33	51	58	56	69	57	54	66	62	58	62	64	46	55	65	75	74	80	65	69	80	70	61	76	58.2
	Minimum	11	22	22	31	21	15	16	15	28	40	40	50	25	21	32	46	37	29	38	29	26	28	31	32	44	42	46	38	42	37	40	31.4
Buckhannon	Maximum	32	43	53	55	39	22	25	29	44	55	54	70	54	38	57	60	52	54	62	49	49	52	65	71	75	76	68	75	67	63	72	54.2
	Minimum	11	20	20	28	20	14	14	11	24	30	42	53	23	20	27	48	27	27	41	30	24	21	25	31	37	46	48	33	50	32	35	29.4
Creston	Maximum	36	48	59	59	54	25	24	33	51	57	58	71	55	47	68	65	53	54	66	56	57	59	75	74	77	71	71	79	73	66	75	58.9
	Minimum	1	15	18	29	23	15	17	12	22	32	40	51	25	24	26	43	40	27	32	21	23	25	28	29	49	62	45	35	52	31	34	29.6
Elkins	Maximum	30	45	54	51	47	15	17	30	47	53	52	68	45	35	65	60	50	52	58	34	47	61	68	67	69	72	62	70	64	58	70	52.1
	Minimum	12	22	17	38	12	9	10	7	27	43	39	45	19	18	22	46	32	28	34	24	18	23	26	36	36	54	36	28	41	39	47	28.5
Fairmont§	Maximum	35	47	61	59	32	26	24	32	51	56	62	70	32	41	70	53	54	52	63	53	55	66	75	78	81	77	86	80	64	64	75	56.6
	Minimum	5	14	21	23	32	13	13	14	15	29	42	46	29	19	24	29	41	30	32	30	23	25	27	29	31	44	47	32	49	37	37	28.5
Glenville	Maximum	39	53	64	63	56	25	25	35	54	59	57	74	65	47	73	71	58	60	67	67	60	71	80	79	81	76	74	81	76	68	78	62.5
	Minimum	2	16	18	24	23	15	16	11	27	25	40	52	25	22	25	48	41	26	39	28	22	24	25	27	36	60	47	32	57	30	34	29.6
Grafton	Maximum	35	48	60	58	52	21	23	34	51	52	63	71	55	41	70	60	54	53	66	48	54	67	75	77	80	78	62	80	74	65	77	58.2
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Lost Creek	Maximum	33	47	60	60	53	22	24	33	50	57	54	69	58	41	69	65	54	59	63	57	55	65	75	76	77	74	68	79	72	61	66	57.7
	Minimum	0	20	16	24	22	14	15	13	26	31	40	52	24	19	23	47	40	22	38	28	20	22	24	24	34	58	47	28	56	29	35	28.7
Mannington	Maximum	35	45	56	57	53	22	23	30	49	55	52	67	69	39	69	65	52	49	62	59	52	63	71	72	78	76	67	76	73	64	73	56.9
	Minimum	3	18	19	28	21	12	15	15	28	30	39	43	24	19	23	47	39	31	47	28	22	23	25	26	33	55	47	28	52	33	34	29.3
Morgantown	Maximum	29	40	50	50	49	18	20	28	43	50	52	55	56	..	63	65	56	..	..	..	..	..	..	..	..	..	..	..	..	..	..	44.9
	Minimum	9	26	26	39	18	9	13	13	26	40	46	52	21	21	26	45	35	28	27	27	25	29	37	43	50	60	47	37	48	39	47	32.5
New Cumberland	Maximum	38	45	55	56	54	36	23	41	46	43	56	57	67	35	62	58	49	41	45	59	54	63	71	71	76	73	63	76	74	65	74	55.8
	Minimum	8	15	22	36	18	10	10	15	28	24	36	42	10	20	29	43	23	28	26	34	22	25	27	28	39	56	44	34	46	31	35	27.5
New Martinsville	Maximum	37	45	60	60	54	22	22	33	52	58	55	68	60	45	61	60	52	58	60	52	53	64	48	57	67	77	75	72	65	80	73	63	79	57.7
	Minimum	7	22	22	28	22	13	15	16	28	38	40	48	23	22	28	46	39	31	38	30	24	27	29	30	38	62	47	34	52	37	38	31.4
Parkersburg	Maximum	38	48	56	57	44	22	22	33	51	57	58	68	42	46	66	60	50	50	65	45	55	65	72	71	76	70	68	76	66	66	74	56.0
	Minimum	18	27	26	39	19	14	17	15	29	42	46	42	26	24	33	46	34	31	38	30	29	32	36	41	51	56	47	43	46	41	50	34.5
Parsons	Maximum	35	46	58	55	47	19	20	31	35	48	54	71	68	36	69	60	57	45	50	56	61	61	73	73	78	59	75	70	65	56	51	54.3
	Minimum	− 5	15	15	29	17	11	12	9	15	24	24	44	21	18	19	44	39	30	28	38	11	21	23	25	33	50	38	25	34	48	34	25.5
Philippi	Maximum	29	43	57	54	50	18	19	28	46	53	54	70	54	36	67	62	52	49	61	54	50	60	72	73	74	75	65	75	65	61	72	54.8
	Minimum	8	24	23	39	17	10	12	10	24	38	45	52	24	18	28	46	39	27	40	25	23	30	37	35	48	59	45	49	53	36	46	32.5
Pickens	Maximum	34	43	53	47	44	10	19	31	44	49	51	67	50	..	63	..	..	57	53	40	47	62	69	69	70	72	65	71	66	59	70	52.7
	Minimum	10	17	21	27	10	6	8	− 1	19	30	38	40	16	..	24	..	..	25	40	31	21	25	30	35	47	51	39	33	45	33	34	26.9
Terra Alta	Maximum	24	40	48	44	47	14	11	22	40	46	47	63	49	29	62	59	47	48	..	46	43	56	67	66	69	72	59	71	62	55	67	49.1
	Minimum	5	17	17	32	13	3	6	4	19	34	40	41	16	12	21	42	31	23	..	21	19	26	30	32	41	49	40	34	48	35	44	26.7
Wellsburg	Maximum	38	46	57	58	53	22	22	31	49	49	52	67	53	39	65	60	52	48	62	49	52	69	71	72	78	72	65	78	74	68	75	56.3
	Minimum	8	16	18	27	20	12	14	14	28	29	38	43	23	19	22	38	36	29	35	29	21	25	25	26	33	54	45	28	45	38	31	28.0
Weston	Maximum	35	46	59	56	54	24	24	31	50	55	55	71	58	41	69	66	54	51	64	56	58	64	74	73	76	78	68	77	72	63	74	57.9
	Minimum	9	23	20	27	22	15	15	12	26	37	42	53	23	24	27	48	42	27	38	29	24	27	29	29	38	63	48	33	54	33	36	31.3
Wheeling§	Maximum	43	51	60	64	29	24	24	36	55	58	60	72	32	46	69	54	42	54	68	47	59	70	78	79	82	74	71	81	62	63	80	57.6
	Minimum	12	18	25	25	27	12	12	12	16	30	42	46	29	19	22	32	37	30	30	30	25	28	30	30	32	40	48	34	42	35	37	28.6
Southern Division.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Bluefield	Maximum	39	40	49	50	45	21	28	31	47	55	55	65	65	44	59	59	58	66	60	58	58	61	61	61	59	61	66	66	54	58	62	53.6
	Minimum	30	18	25	35	18	11	12	4	21	37	44	49	21	21	30	48	44	34	48	26	28	28	32	43	50	43	54	45	45	34	36	32.7
Charleston	Maximum	50	54	52	59	54	36	29	49	52	54	60	73	59	59	70	65	61	59	56	50	54	70	75	75	79	76	69	80	64	70	76	60.4
	Minimum	12	15	20	15	12	19	15	13	15	29	42	42	30	26	30	33	32	31	35	32	35	29	30	32	37	52	46	35	32	34	36	28.8
Gary§	Maximum	36	52	58	54	29	24	22	36	52	52	57	52	37	48	68	61	59	67	64	64	56	67	69	69	72	70	72	70	65	65	70	56.0
	Minimum	..	16	16	23	27	16	15	12	10	18	34	41	31	25	30	31	38	32	33	32	32	27	28	39	36	45	31	39	46	30	30	28.5
Green Sulphur Spgs.	Maximum	38	50	57	53	47	24	24	37	52	49	50	72	67	47	68	60	60	69	60	60	55	66	68	66	68	68	74	70	67	65	68	57.4
	Minimum	15	14	18	31	20	13	14	4	13	24	40	42	23	23	25	48	44	40	45	39	23	22	25	27	41	44	44	33	47	28	27	28.9
Hinton §	Maximum	43	56	60	53	34	31	23	40	58	48	50	73	34	53	72	56	66	69	65	49	71	72	76	76	79	71	70	69	74	76	75	58.1
	Minimum	17	17	17	21	27	15	15	6	6	17	31	39	33	25	25	28	38	34	34	35	25	25	28	27	30	43	43	36	40	30	30	27.0
Holcomb	Maximum	33	47	54	48	46	18	19	32	48	47	52	69	57	41	65	59	57	61	60	56	52	64	67	66	69	72	66	71	66	60	70	54.6
	Minimum	13	9	12	37	17	11	11	− 2	9	26	37	46	20	20	25	46	32	27	44	25	17	24	27	26	45	55	36	31	52	26	27	26.8
Huntington §	Maximum	41	51	64	61	27	25	22	36	54	52	62	75	32	58	73	58	60	62	67	50	60	70	78	80	83	70	79	79	60	68	79	59.2
	Minimum	14	17	24	25	26	18	18	11	15	32	43	45	30	26	30	37	40	32	33	32	28	30	32	32	42	55	42	45	49	40	38	31.6
Lewisburg	Maximum	35	47	53	47	42	22	21	34	49	49	47	68	61	41	63	55	58	62	57	51	50	63	66	65	66	71	68	69	65	61	68	54.0
	Minimum	13	14	18	28	18	10	13	4	18	27	36	38	20	20	23	43	39	32	42	26	24	22	25	27	36	51	45	32	43	30	29	27.3
Marlinton	Maximum	32	40	46	46	42	16	20	28	44	46	42	60	44	34	58	50	52	56	46	40	46	56	60	58	60	66	60	62	60	54	62	47.9
	Minimum	8	12	12	16	16	8	8	− 2	14	20	32	34	18	16	18	36	34	34	36	22	18	16	18	20	16	44	32	26	36	30	24	21.7
Point Pleasant	Maximum	42	50	60	60	50	28	24	36	53	59	59	72	62	51	69	66	56	55	67	51	60	70	75	75	80	74	75	79	73	69	77	60.5
	Minimum	13	23	22	32	24	17	17	11	26	35	42	51	25	24	32	47	36	29	40	30	27	30	32	36	47	61	43	40	51	39	39	33.0
Powellton	Maximum	35	35	59	55	47	25	23	35	53	46	59	74	62	45	69	63	60	61	68	61	57	69	74	73	..	78	72	76	66	65	75	58.1
	Minimum	17	15	23	36	23	20	18	8	22	32	39	45	26	26	29	49	43	32	40	30	27	28	31	36	..	48	47	39	55	35	35	32.0
Robertsburg§	Maximum	29	49	58	59	28	23	22	35	52	54	63	73	32	53	68	59	52	59	66	58	58	69	76	75	79	70	70	74	58	76	..	56.6
	Minimum	7	11	21	24	25	17	17	9	13	30	34	37	29	24	27	35	38	30	33	31	26	28	31	34	42	50	31	31	44	33	35	28.3
Ryan	Maximum	36	47	56	58	50	24	25	33	50	52	56	71	54	47	59	62	57	56	66	48	57	66	74	72	77	71	70	77	68	67	76	57.6
	Minimum	0	12	17	30	22	15	14	6	17	22	24	49	26	19	28	40	36	26	41	27	20	22	24	27	39	59	35	34	51	28	30	27.1
Spencer §	Maximum	42	54	63	51	32	28	23	38	51	58	62	72	35	48	69	58	56	58	66	50	60	68	75	73	71	71	71	80	61	66	76	57.8
	Minimum	4	18	21	24	24	14	15	12	15	30	41	45	28	24	35	32	48	28	24	29	24	28	21	32	32	45	46	37	43	32	38	28.8
Sutton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Union	Maximum	40	50	53	51	35	24	23	35	49	52	50	50	32	40	64	62	69	64	63	57	60	61	77	81	80	79	81	80	74	64	70	56.9
	Minimum	14	16	15	17	20	11	12	6	15	19	32	30	22	21	32	49	40	30	43	28	29	33	26	39	30	31	32	30	34	32	29	26.4
White Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Williamson§	Maximum	28	48	56	57	32	26	21	34	51	50	58	69	34	48	64	60	58	60	64	45	55	63	68	70	75	70	71	70	69	65	70	54.8
	Minimum	15	15	22	26	32	20	18	10	11	22	35	43	34	28	30	35	40	35	35	34	32	32	32	35	38	49	43	43	50	35	35	31.0

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.
NO RAIN
W. T.

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY

DEC - 1 1920

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

APRIL, 1920

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
AUGUST 24, 1920

Departure of the Mean Temperature from the Normal, April, 1920.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVIII. PARKERSBURG, W. VA., APRIL, 1920. NO. 4

GENERAL SUMMARY.

The month was cool, wet, windy, and decidedly unfavorable for growth and farm work. However, the conditions were generally favorable for apples and peaches, which were in bloom at the close of the month. Cherries, plums, and pears were killed in some localities during the first decade, when there were heavy to killing frosts. April was cooler in only five years and wetter in only four years of State record. There was an average of 14 days with .01 inch more of rain. The month was characterized by nearly continuously moderate to brisk winds, becoming high on several dates. A severe wind storm occurred at Parkersburg during the late afternoon of the 4th. Several tin roofs were blown off, a few windows blown in, and many advertising signs blown down. For one minute the wind reached a velocity of 60 miles an hour. A number of oil well derricks were blown down in the Sistersville district on the same day. The average wind velocity for the month at Parkersburg, 8.4 miles, is the highest of April record for that station. Hail storms were frequent in the State. Winter grains were in fair to poor condition.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 29.86 and 29.85 inches, respectively The highest and lowest readings observed were as follows: Parkersburg, 30.31 inches on the 25th, and 29.22 inches on the 4th. Elkins, 30.31 inches on the 25th, and 29.28 inches on the 4th.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 49.7°. The departure from the normal for 42 stations having ten or more years of record was —2.0°. The month opened seasonally warm and the temperatures were also considerably above the normal on the 16th and 21st-22d, with the highest readings occurring generally on the 22d. Unseasonally cool weather prevailed from the 5th to the 11th, and on the 13-14th, 24-26th, and 28th, with the lowest temperatures occurring on the 6th and 10th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 65 per cent; 8 p. m., 60 per cent. The April averages for the same hours for the past 31 years are 75 and 63 per cent, respectively. Elkins, 8 a. m., 75 per cent; 8 p. m., 65 per cent. The April averages for Elkins for the same hours for the past 20 years are 80 and 64 per cent, respectively.

PRECIPITATION.

The monthly mean for the State, 62 stations reporting, was 4.91 inches. The departure from the normal for 45 stations having ten or more years of record was + 1.42 inches. Rain occurred in most districts from the 1st to the 8th and on the 12-13th, 16-17th, 19-21st, 23d, 26-28th, and 30th. The greatest amounts were recorded on the 4th, 13th, 17th, 20th-21st, and 26-27th. In the west-central counties the amounts were excessive on the 20th, averaging near 4 inches in the vicinity of Parkersburg. The snowfall was somewhat below the average.

HAIL.

Light hail fell as follows: Buckhannon, 30th; Camden-on-Gauley, 12th; Charleston, 4th and 12th; Creston 22d and 30th; Fairmont, 2d; Hinton, 22d; Huntington, 4th; Lewisburg, 23d; Morgantown, 2d; Pickens, 23d; Robertsburg, 4th; Ryan, 30th; Smithfield, 5th; Stony River Dam, 4th and 23d; Weston, 23d; Wheeling, 28th. Heavy hail fell at Powellton on the 20th and at Parkersburg on the 30th. The hail stones in both of these storms were about the size of walnuts. Owing to the limited areas covered by the storms and lack of growing crops, no damage of consequence resulted.

RIVERS.

Owing to heavy rains over western West Virginia and southern Ohio, the rivers in the district reached seasonally high stages from the 21st to the 23d. Low bottoms were flooded, causing considerable delay to farming operations. The following crest stages were noted: Glenville, 22.5 feet; Parkersburg, 30.7 feet; Point Pleasant, 37.7 feet.

WIND.

The average wind velocity at Parkersburg was 8.4 miles per hour, or 1.4 miles above the April average for the past 30 years. The average at Elkins was 8.0 miles per hour, or 3.0 miles above the April average for 20 years. The highest velocity at Parkersburg was 54 miles per hour from the southwest on the 4th, and at Elkins 37 miles per hour from the northwest on the 2d.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 45 per cent of the possible amount, or 2 per cent below the April average for 22 years. The average at Elkins was 34 per cent, or 10 per cent below the April average for 21 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bayard, 17th and 19th; Elkins, 11th; Hinton, 25th and 30th; Mannington, 18th; Wheeling, 1st, 12th, 18th, 22d, and 26th.

Halo, lunar: Elkins, 29th.

Halos, solar: Bayard, 24th; Elkins, 25th.

Thunderstorms (dates and number of stations reporting): 2d, 5; 3d, 1; 4th, 17; 5th, 5; 12th, 2; 13th, 3; 16th, 1; 17th, 1; 19th, 4; 20th, 20; 21st, 6; 22d, 5; 23d, 13; 27th, 6; 28th, 1; 29th, 1; 30th, 15.

COMPARATIVE DATA FOR APRIL.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	52.0	..	....	2.81	....	....	....	..	..	..
1892	50.6	87	17	4.28	....	....	....	..	..	..
1893	53.4	92	20	5.18	8.98	2.91	0.8	8	8	14
1894	50.6	90	14	3.32	5.30	1.97	1.6	12	8	10
1895	52.9	90	17	2.93	5.47	0.90	....	11	9	10
1896	57.7	95	12	2.06	4.35	0.82	....	13	12	5
1897	51.5	90	19	2.97	7.10	1.58	....	11	10	9
1898	48.0	86	2	3.14	4.86	1.40	....	10	9	11
1899	53.4	93	18	1.84	3.17	0.92	0.5	13	9	8
1900	51.8	88	16	1.35	2.08	0.43	T.	14	7	9
1901	47.5	95	18	7.05	10.70	4.95	6.0	10	4	16
1902	49.8	96	21	3.06	4.57	1.53	10.0	10	10	10
1903	51.3	91	8	4.47	7.39	2.29	0.4	11	8	11
1904	47.7	82	12	3.15	5.71	1.12	1.3	9	9	12
1905	52.2	89	14	2.78	5.57	1.10	1.5	11	9	10
1906	54.1	92	15	3.16	6.59	0.57	0.3	15	8	7
1907	45.6	92	10	3.49	6.66	1.42	6.1	8	8	14
1908	54.8	92	18	4.30	8.02	0.77	0.3	13	8	9
1909	53.0	93	10	5.04	8.57	1.70	2.4	10	11	9
1910	53.2	91	16	3.39	9.07	1.63	0.6	10	8	12
1911	49.5	88	6	4.29	7.00	0.83	1.5	9	8	13
1912	55.4	88	20	4.03	8.00	1.09	0.2	11	10	9
1913	52.4	92	12	2.99	5.48	1.61	0.1	14	6	10
1914	52.1	93	16	4.63	10.05	1.29	0.2	10	9	11
1915	55.5	101	10	1.93	5.69	0.10	T.	15	8	7
1916	50.5	90	17	3.07	5.70	1.25	4.3	9	7	14
1917	51.7	90	10	2.99	5.31	1.29	1.8	13	8	9
1918	50.3	85	18	5.11	9.14	1.88	10.4	9	7	14
1919	51.8	90	10	2.44	4.21	1.03	0.2	12	8	10
1920	49.7	91	15	4.91	7.26	1.64	1.2	8	7	15
Means and extremes ..	51.7	101	2	3.54	10.70	0.10	2.2	11	8	11

Climatological Data for April, 1920.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	19	43.3	+ 1.4	81	21	15	6	40	4.46	+0.60	0.61	11.0	20	3	11	16	w.	G. C. Dixon.
Brandywine††	Pendleton		4	50.0	.....	83	22	20	11	47	3.33	.....	0.70	3.0	12	15	5	10	n.	Elmer Keister.
Burlington	Mineral	875	26	47.2	− 3.5	82	22	20	10	41	5.16	+2.19	0.84	3.0	13	6	20	4	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	31	.....	.....	.....	.....	.....	.....	.....	4.30	+1.28	0.90	0	7	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	28	49.8	− 1.7	85	22	25	9	36	4.39	+1.29	0.98	T.	16	16[a]	2[a]	11[a]	e.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	24	52.9	− 1.9	88	22	21	10†	48	4.37	+1.44	0.64	T.	15	27	3	0	.....	M. S. Henkel.
Piedmont	Mineral	919	7	47.6	.....	84	22	22	10	43	4.92	.....	0.69	.....	17	6	16	8	se.	C. A. Suter, Jr.
Romney	Hampshire	824	22	51.8	+ 0.3	88	1	19	10	47	4.65	+1.70	0.75	1.0	15	4	19	7	w.	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	21	43.8[b]	− 7.6	84[b]	22	20	10†	46	2.16	−0.33	0.55	T.	9	13	8	9	w.	J. M. Mallow.
Wardensville	Hardy	1,200	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Luther F. Sutton.
Averages and	extremes	.....	....	48.1	− 2.2	88	1†	15	6	48	4.30	+1.17	0.98	2.1	14	11	11	8	w.	
Northern Division.																				
Bens Run	Pleasants	622	18	50.6	− 1.7	86	22	25	6	45	4.42	+0.36	1.25	T.	14	8	12	10	.....	J. D. Riggs.
Brandonville	Preston	1,809	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Miller.
Buckhannon	Upshur	1,411	23	51.1	0	82	22	23	6	40	5.78	+1.59	1.00	T.	9	8	10	12	.....	H. A. Darnall.
Cortland	Tucker	3,300	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Samuel Harmon.
Creston	Wirt	701	18	52.0	− 0.1	88	22	23	6	47	5.22	+1.27	2.07	T.	13	8	1	21	sw.	J. M. Reed.
Davis	Tucker	3,093	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Branson Harper.
Elizabeth	Wirt	646	8	.....	.....	.....	.....	.....	.....	.....	4.82	.....	1.76	.....	12	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	19	47.1	− 1.6	82	22	20	10	44	5.45	+2.16	1.32	3.7	18	5	5	20	w.	U. S. Weather Bureau.
Fairmont	Marion	883	14	49.8	− 2.1	86	22	21	6	44	4.26	+1.14	1.26	T.	18	11	5	14	w.	F. P. Hall.
Glenville	Gilmer	738	26	52.8	− 0.6	90	23	22	6†	52	5.74	+1.94	2.02	T.	14	13	9	8	w.	Howard R. Brannon.
Gratton	Taylor	1,000	27	51.6[x]	0	88	22	22[x]	10	47[x]	5.97	+2.28	1.47	T.	18	5	15	9	e.	W. C. Byers.
Lost Creek	Harrison	1,026	22	50.6	+ 0.4	85	22	20	6	48	4.12	+0.72	1.02	T.	14	11	4	15	w.	Allen Smith.
Mannington	Marion	974	17	49.0	− 2.2	82	22	20	6	44	4.85	+0.93	1.06	2.9	21	6	8	16	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	27	50.0[d]	− 1.3	85[d]	23	22	6†	39[d]	3.01	−0.38	1.10	.....	9	2	6	22	.....	Prof. E. L. Andrews.
Moundsville	Marshall	642	17	47.6	− 4.4	86	22	23	10†	51	4.08	+1.10	0.98	2.5	12	4	18	8	w.	G. W. Wright.
New Cumberland	Hancock	987	22	47.0[a]	− 2.9	81[a]	22	18[a]	10	45[a]	4.37	+0.97	1.03	3.5	16	4	15	11	sw.	M. F. Smith.
New Martinsville	Wetzel	634	26	49.6	− 3.6	88	22	24	6†	46	4.25	+0.69	1.10	T.	13	8	1	21	s.	Wm. Ankrom.
Parkersburg	Wood	638	33	50.6	− 2.4	85	22	26	6	36	6.38	+3.47	3.40	T.	18	5	8	17	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	20	47.0	− 1.8	84	22	18	9	48	5.29	+1.43	.....	T.	10	4	4	22	.....	J. W. Swisher.
Philippi	Barbour	1,149	23	49.6	− 1.7	89	23	21	6†	47	5.69	+1.82	1.56	T.	19	7	8	15	w.	Prof. Vernon E. Wood.
Pickens	Randolph	2,697	17	45.4	− 2.9	82	22	18	6	44	7.26	+2.28	1.10	17.0	18	11	5	14	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	33	.....	.....	.....	.....	.....	.....	.....	5.89	+1.93	1.26	.....	17	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	11	.....	.....	.....	.....	.....	.....	.....	4.75	+1.20	2.05	T.	14	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	14	47.9	− 3.3	84	22	20	10	42	5.25	+1.44	1.45	0.7	20	14	7	9	se.	G. M. Whisler.
Stony River Dam	Tucker	.....	0	49.2[a]	.....	74[a]	22	16	6	54[a]	4.12	.....	1.25	5.0	13	3	9	18	w.	A. C. Becker.
Terra Alta	Preston	2,612	19	44.2	− 3.1	80	22	16	6†	39	6.63	+2.79	0.80	.....	19	3	2	25	w.	W. J. Grimm.
Wellsburg	Brooke	1,225	19	47.6	− 1.5	84	22	18	10	46	4.81	+1.78	0.85	0.5	17	8	8	14	w.	George P. Pfister.
Weston	Lewis	1,026	24	51.6	− 1.0	84	22	23	6	46	5.58	+1.57	1.58	T.	18	4	12	14	ne.	Weston State Hospital
Wheeling	Ohio	645	33	48.8	− 3.6	87	22	20	9	45	4.39	+1.30	1.45	1.2	17	4	8	18	w.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	49.2	− 1.9	90	23	16	6†	54	5.09	+1.49	3.40	1.7	15	7	8	15	w.	
Southern Division.																				
Bancroft	Putnam	574	16	50.8	− 2.9	88	22	26	6†	45	4.54	+0.75	1.40	0.2	15	14	0	16	s.	R. E. Dent.
Beckley	Raleigh	2,440	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John A. Ewart.
Bluefield	Mercer	2,558	25	50.6	− 2.7	81	22†	21	6	44	4.05	+0.59	1.20	1.0	15	12	9	9	.....	Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	5	.....	.....	.....	.....	.....	.....	.....	5.49	.....	1.60	3.0	11	5	1	24	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	17	52.8	− 4.0	80	22	29	10	42	5.52	+1.84	1.10	T.	12	9	2	19	w.	C. V. Lewis.
Clay	Clay	706	4	.....	.....	.....	.....	.....	.....	.....	4.91	.....	1.11	0.5	12	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	18	51.1	− 1.7	86	22	21	6	43	5.52	+2.14	1.20	T.	18	3	17	10	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	4	.....	.....	.....	.....	.....	.....	.....	6.84	.....	4.10	T.	13	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	4	.....	.....	.....	.....	.....	.....	.....	5.00	.....	2.73	T.	11	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	5	.....	.....	.....	.....	.....	.....	.....	4.47	.....	1.44	T.	10	.....	.....	.....	.....	Lockmaster.
Dam 26 O. R.	Mason	505	4	.....	.....	.....	.....	.....	.....	.....	5.06	.....	1.40	0	13	.....	.....	.....	.....	U. S. Engineer Office.
Evans	Jackson	606	8	52.6	.....	77	22†	24	7	32	6.36	.....	1.91	T.	17	10	3	17	.....	B. F. Sayre.
Gary	McDowell	1,426	4	51.5[a]	.....	87[a]	22	24[a]	6	41[a]	4.29	.....	1.28	T.	14	4[b]	0[b]	24[a]	.....	U. S. Coal & Coke Co.
Gassaway	Braxton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Green Sulphur Spgs	Summers	1,600	24	50.4	− 0.5	84	22	21	6	45	6.84	+3.68	1.32	4.0	15	12	3	15	w.	H. A. Hays.
Hinton	...do	1,450	23	49.6	− 3.5	84	22	22	6	50	4.82	+1.37	1.20	0	14	9	1	20	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	8	48.4	.....	86	22	18	6	49	4.70	.....	0.64	5.2	22	8	3	19	.....	W. C. Williams.
Huntington	Cabell	538	26	52.7	− 1.3	91	22	29	6†	44	5.78	+2.15	2.20	T.	15	11	3	16	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	1	.....	.....	.....	.....	.....	.....	.....	3.55	.....	1.07	0	9	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	4	.....	.....	.....	.....	.....	.....	.....	5.48	.....	1.39	T.	12	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	20	48.8	− 1.4	81	22	19	6	46	5.61	+2.41	1.15	0	15	8	10	12	nw.	Geo. T. Argabate.
Logan	Logan	687	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. C. Flanagan.
Madison	Boone	704	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton ††	Pocahontas	2,131	21	43.6	− 2.4	76	22	16	6†	46	5.56	+1.23	1.42	2.0	16	2	17	11	.....	S. L. Brown.
Point Pleasant	Mason	553	27	52.9	− 2.0	88	22	25	6†	43	6.22	+2.97	2.82	T.	15	4	6	20	.....	W. D. Holmes.
Powelton	Fayette	933	24	54.7	+ 0.2	90	22	25	6	47	4.74	+1.12	1.10	0.4	18	12	10	8	.....	Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	4	.....	.....	.....	.....	.....	.....	.....	4.48	.....	1.30	0.8	13	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	4	.....	.....	.....	.....	.....	.....	.....	4.88	.....	1.45	0.1	9	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	20	50.2	− 2.9	78	4†	24	11	44	4.27	+0.59	1.10	T.	13	10	1	19	s.	E. C. Brace, Jr.
Ryan	Roane	700	17	51.0	− 1.5	86	22	20	6†	48	4.59	+0.78	1.04	0.4	18	5	11	14	.....	Wm. E. Ryan.
Sharples	Kanawha	.....	0	.....	.....	.....	.....	.....	.....	.....	3.71	.....	0.85	T.	11	.....	.....	.....	.....	C. E. Rippetoe.
Sissonville	Kanawha	625	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. N. Johnson.
Spencer ††	Roane	784	16	50.4	− 2.1	88	22	22	10	46	5.41	+1.09	1.38	.....	12	4	16	10	.....	A. M. McKown.
Sutton	Braxton	839	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lawrence Freeman.
Union	Monroe	2,250	16	50.2	− 0.4	84	22	21	6	46	1.64	−1.33	0.50	0.5	8	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Ayres.
Williamson	Mingo	660	20	51.4	− 3.8	85	22	30	6†	38	4.32	+0.98	1.08	T.	11	13	4	13	w.	J. F. Keyser.
Averages and	extremes	.....	....	51.2	− 2.0	91	22	18	6	50	4.92	+1.43	4.10	0.6	14	9	5	16	w.	
State averages and	extremes	.....	....	49.7	− 2.0	91	22	15	6	54	4.91	+1.42	4.10	1.2	14	8	7	15	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

[x] Approximated by the observer.

Daily Precipitation for April, 1920.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac	.01	.21		.30	.61	.16	.16	.16					.39	.04		.18	.31	.04	.21	.49	.02	.31	.16			.12	.19	T.		.39		4.46
Brandywine	do	T.	.60		.20	.15		.35	.05				T.	.28			T.	.25	T.		.20	.50		.25	T.			.25			.25		3.33
Burlington	do		.60		*	.84		T.	.30				*	.33			*	.60	.50		.70			.24				.59			.46		5.16
Harpers Ferry	do			T.	.90	.90									.40			T.		.40		.90		.25	T.			.55	T.				4.30
Martinsburg	do		.98		*	.62	.20		T.				*	.45			*	.22	.28		*	.60		.08			*	.53	.12		.28		4.39
Moorefield	do	T.	.64	.27		.60	.12		T.				T.	.30			.08	.16	T.	.20	.54	.40		.21			.24	.11	.10		.40		4.37
Piedmont	do	T.	.57		.25	.39	.11	.22	.07				.05	.14			.16	.36		.48	.69	.38	T.	.06	T.	T.	.35	.15	T.		.49		4.92
Romney	do		.68		*	.38	*	.50	.08				*	.75			.46		.35		*	.75		.15	T.		*	.55			T.		4.65
Upper Tract	do			.40	.20	.20	T.	.10	.05										.10		.55						.10		T.		.46		2.16
Wardensville	do																																
Northern Division.																																	
Bens Run	Ohio				.51	T.	.20						.10	.30			.20	.28		.05	1.25	.48		.18			.22	.33	.02		.30		4.42
Brandonville	Monongahela																																
Buckhannon	do	T.	.40		.40	T.	.20	T					T.	.78			T.	1.00		T.	.70	.70					T.	.70			.90		5.78
Cortland	Monongahela																																
Creston	Little Kanawha		.02		.35	.20	T.	.40						.35	T.			.45	.10		.50	1.57		.40	T.			.40	.30		.18		5.22
Davis	Monongahela																																
Elizabeth	Little Kanawha	.02			.40	.30		.45						.36				.60			.12	1.76	.05	.15				.52		.09			4.82
Elkins***	Monongahela	.04	.27		.35	.11	.28	.08	T.				.20	.21		T.	.37	.38	T.	.04	1.01	.31	T.	.36	T.		.23	.23	.01		.97		5.45
Fairmont	do	T.	.11	.03	.30	.43	.04	.36	T.	.02				.46	T.		T.	.46	.11	.14	T.	1.26	.02	.06	.04	T.		.31	.09	T.	.02		4.26
Glenville	Little Kanawha	.03		.02	.30	.20		.55						.68				.88			.18	2.02		.16	.06			.38	.10		.18		5.74
Grafton	Monongahela	T.	.13		.23	.63	*	.49	T.					.76			*	*	.58	.14	1.10	.37		.15	.06		.33	*	.37		.63		5.97
Lost Creek	do		.17		.40	.16	.03	T.	T.				T.	.75			.09	.40		.06	1.02	.08		.26			.15	.24	T.		.31		4.12
Mannington	do	.01	.16		.49	.38	.16	.26	.03				.01	.31			.19	.34	.02	.09	1.06	.18		.13	.07		.24	.33	.04	T	.35		4.85
Morgantown	do				.55	.01	.03										.40	.45			1.10	.17					.10	.20					3.01
Moundsville	Ohio				.18	T.	.18	.04						.20			.35	.25	T.	.20	.98	.75		T.			.25	.50	T.		.20		4.08
New Cumberland	do				T.	.04	.08	.04	T.	T.			.02	.12	T.	T.	.75	1.03	.05		.83	.37	.02	.20			.14	.22	.02		.44		4.37
New Martinsville	do				.40		.20	.20	T.					.40			.15	.30		.10	1.10	.20		.20			.25	.45			.30		4.25
Parkersburg ***	Ohio	.03	.03	T.	.34	.01	.34	.01					.31	T.		T.	.30	.16	T.	.10	3.18	.22	.01	.01			.21	.31	.02		.79		6.38
Parsons	Monongahela					T.	*	*	1.01					T.			*	.76				*					*	*	2.77		.55		5.29
Philippi	do		.25		.20	.52	.06	.37	T.				T.	.45	.05		.26	.34	.02	.03	.34	1.56		.29	.03		.16	.43	.11		.22		5.69
Pickens	do	T.		.22	.10	.32	.48	.48	.16				.11	.99			.52	.40		.19	1.02	.94		.11	.19		*	.33	T.		.70		7.26
Rowlesburg	do		.26	.09	.20	.65	.16	.58						.54				.55	.15	.24		1.26		.14	.18	.03		.45	.35		.05		5.89
Saint Marys	Ohio		T.		.43	.06	T.	.43						.35				.47	.05	.05	.05	2.05		.10	.04			.40	.23		.04		4.75
Smithfield	Fishing Creek		.02	.01	.50	.60	.04	.53	.91					.32	.04			.52		.10	.04	1.45	.05	.05	.09			.52	.28	.02	.05		5.75
Stony River Dam			.48		.14	.54		.36	.08								T.	T.		.16		1.25		.34	.12	.05		.29	.30		.01		4.12
Terra Alta	Monongahela		.40		.24	.57	*	*	.87				.30	.36			.18	.40	T.	.45	.80	.44		.36	.21		.18	.31	.35		.21		6.63
Wellsburg	Ohio	T.	.11		.07	.03	.18	.02	.02					.07			.83	.70		.13	.85	.68		.10			.20	.50	.06		.26		4.81
Weston	Monongahela	.04	.22		.25	.35	.12	.47					.03	.53			.19	.46		.04	.91	.67		.23	.04		.23	.28			.52		5.58
Wheeling	Ohio		T.	T.	.13	.04	.02	.20	.01					.14	T.	T.	.22	.65	T.	.22	.05	1.45	.20	.03	.04			.35	.58	.08	T.		4.39
Southern Division.																																	
Alum Creek																																	
Bancroft	Great Kanawha	.05	.21	.07	.20	.25	.02	.51						.35	T.			.09			.81	1.40	.20					.27	.07	.04				4.54
Bluefield	do	.15	1.20		.40	.15	.10	.40		.10				.10				T.				.40		.10		.10	.35	.05		.05	.35		4.05
Camden-on-Gauley	do	.80	.22			T.	.16	.08	T.				.20	T.			.80			.33	1.60					1.00	.20				.10		5.49
Charleston	do	.15	.20		T.	.24		.87	T.					.48				.10			1.10	.98		.50			T.	.30	.40		.20		5.52
Clay	do		.16		.15	.11	.05	.55						.73	T.			.40			.73	1.11		.20				.40	.32				4.91
Cuba	Sand Creek	.05	.05		.70	T.	.15	.10					.10	.15			.40	.45		.20	1.20	.60		.25	.05		.25	.27	.15		.40		5.52
Dam 19 O. R.	Ohio		.04	.04	.38	.03	T.	.40						.50			.02	.55	T.	T.	.10	4.10						.40	.22	T.	.06		6.84
Dam 20 O. R.	do		.08	.06	.40	.03	T.	.45									T.	.40			.22	2.73		.07				.46	T.		.10		5.00
Dam 22 O. R.	do		.10		.40	T.	T.	.61						.21				.26			.95	1.44						.40	.05		.05		4.47
Dam 26 O. R.	do		.20	.10	.45	.51		.45						.30				.10			.75	1.40		.15				.35	.20		.10		5.06
Evans	Ohio	.03	.21		.60	.07	.10	.27					.07	.28				.07		.08	1.91	.70		.17			.34	.40	.38		.68		6.36
Gary	Big Sandy	.28	1.28	.03	.16	.58	T.	.50					T.	.40				.02		.03		.31	T.	.09			.28	T.	.30	.03			4.29
Gassaway	Great Kanawha																																
Green Sulpr. Spgs.	do	.65	.74		.34	.42	.16	.21					T.	.36			.30	.23	.11		1.32	1.12			T.		.60	T.	.18	T.	.10		6.84
Hinton	do	.10	1.20	.02	.28	.80	.04	.40						.22				.12			.42	.56		.08				.48			.10		4.82
Holcomb	do	.37	.64		.25	.14	.16	.43	.09				.06	.39	.02		.21	.13	.03	.16	.48	.47		.06	.04		.29	.09	.08		.11		4.70
Huntington	Ohio	.16	.32	.12	.32	.86	.04	.56						.28				.10			1.22	.98		.04			T.	.54	.14		.10		5.78
Kanawha Falls	Great Kanawha	T.	T.		.12			.55	.15					.50				.10			1.07	.50					T.	.28	.28				3.55
Kayford	do	.35	1.06		.05		.06	T.	.52					.41	.01			.31	T		1.39	.78			T.		T.	.27	T.		.27		5.48
Lewisburg	do	.51	.92		.37	.35	.05	.44	.03				T.	.24			T.	.11		.07	1.15	.50		.31			.42			.14	T.		5.61
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do	.40	1.02		.40	.55	.10	T.	.10				.15	.55			.15	.22		.26	.16	.74		.12			.46	T.			.18		5.56
Point Pleasant	Ohio	.13	.05		.71	T.	.14	.32						.25			.02	.06		.44	2.12	.70			.10		.25	.16			.77		6.22
Powellton	Great Kanawha	.66	.52		.15	.03	.10	.52	.02				.02	.45			.10	.06		.15	.95	.53					.28	.04		.11	.05		4.74
Raleigh	do	.40	1.30		.15	.26	.09	.53						.46				.25			.28						.05	.41	.08		.22		4.48
Renick	do		*	1.45	.50		.40	.01										.25	T.		1.09	.60						.46			.12		4.88
Robertsburg	do	.10	.18		.31	.37		.50						.37				.07			.71	1.10		.17				.25	.08		.06		4.27
Ryan	do	.02	.09		.51	.02	.08	.39					.32	.13			.01	.38	.01	.20	1.04	.24		.11			.11	.43	T.		.50		4.59
Sharples	Coal River	.32	.85		.15	T.	T.	.61						.50				.20			.15	T.					.18	.25	.27		.23		3.71
Sissonville	Great Kanawha																																
Spencer	Little Kanawha		.10	T.	.39	.47		T.	.49					.35	T			.20	T.		.32	1.38		.34				.26	.36		.25		5.41
Sutton	Great Kanawha																																
Union	do				.25	.15	.04						.10								.20	.50					.30			.10			1.64
White Sulphur Spgs.	do																																
Williamson	Big Sandy	.68	1.08		.22		.02	.41						.45				.20				.64					.12	.40			.10		4.32

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement
T. Trace, or less than 0.01 inch.
††† Probably incomplete.

Daily Temperatures for April, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	71	65	70	60	60	31	32	35	38	44	54	60	48	39	60	54	49	63	61	57	81	72	59	57	49	50	54	40	59	61	..	54.4
	Minimum	40	46	40	40	29	15	23	24	23	22	20	38	26	22	20	33	41	31	41	41	49	42	38	39	28	29	34	28	34	39	..	32.2
Brandywine	Maximum	67	65	60	75	60	50	42	50	49	50	67	65	60	55	65	68	57	70	65	69	75	83	80	66	64	60	70	66	72	77	..	63.8
	Minimum	40	33	39	40	31	24	32	26	25	21	20	30	32	25	24	44	45	40	47	45	47	36	52	46	27	44	45	40	40	42	..	36.1
Burlington	Maximum	71	74	63	55	44	38	35	42	50	50	57	57	51	50	67	72	52	63	63	59	75	82	74	57	61	50	63	55	65	75	..	57.2
	Minimum	38	52	42	40	26	28	26	29	21	20	27	30	32	32	26	47	44	38	47	47	50	41	50	47	28	32	44	43	44	44	..	37.2
Martinsburg§	Maximum	69	71	67	48	47	46	46	44	52	52	58	66	46	53	67	63	45	63	65	60	78	85	78	62	62	56	52	57	68	76	..	60.1
	Minimum	43	43	45	41	40	28	28	31	25	26	30	35	38	35	33	34	41	38	42	47	50	49	49	52	38	38	42	46	47	50	..	39.6
Moorfield	Maximum	75	80	76	74	68	50	45	50	57	57	64	65	62	53	72	72	56	71	66	61	78	88	85	72	64	62	68	58	70	80	..	66.6
	Minimum	44	53	41	43	37	27	35	33	25	21	21	31	34	28	25	54	45	46	48	52	54	40	54	49	28	35	44	40	45	45	..	39.2
Piedmont	Maximum	71	76	64	54	46	43	40	41	43	51	57	58	52	49	66	65	51	63	62	56	73	84	70	53	62	52	48	47	60	68	..	57.5
	Minimum	40	54	37	41	27	24	30	28	24	22	25	33	30	32	27	47	43	40	47	49	53	41	49	45	33	34	44	42	41	50	..	37.7
Romney	Maximum	88	81	80	70	68	47	44	44	50	53	62	60	60	60	70	71	56	66	65	64	71	87	84	68	65	62	53	58	67	77	..	65.0
	Minimum	41	53	42	39	32	24	34	28	30	19	23	30	38	26	40	52	43	38	46	48	52	42	51	47	30	34	44	45	42	46	..	38.6
Upper Tract	Maximum	67	65	60	58	49	34	40	45	47	47	55	56	50	45	46	47	53	56	56	54	56	84	..	69	68	59	..	65	64	78	..	56.2
	Minimum	45	32	36	30	30	28	24	23	21	20	20	25	28	28	28	29	30	24	25	45	45	38	..	26	28	49	..	40	41	41	..	31.5
Wardensville	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Northern Division.																																	
Bens Run	Maximum	75	69	67	74	63	37	46	46	49	50	64	70	56	48	76	66	54	65	64	60	74	86	79	59	59	56	67	52	63	69	..	62.1
	Minimum	46	40	35	43	29	25	31	31	28	26	26	39	29	32	31	51	47	45	48	50	58	43	41	45	32	38	51	42	43	49	..	39.0
Buckhannon	Maximum	74	73	60	75	52	41	41	45	50	44	58	72	58	48	67	62	64	65	65	64	72	82	76	60	57	58	68	56	62	72	..	61.4
	Minimum	42	53	32	45	28	23	30	33	34	33	25	36	29	31	29	53	56	45	59	53	58	42	53	45	29	43	52	42	40	50	..	40.8
Creston	Maximum	70	70	67	79	76	45	46	51	50	49	67	67	60	52	71	67	57	65	63	61	75	88	81	58	59	58	58	57	60	73	..	63.3
	Minimum	45	54	28	44	31	23	32	35	38	34	34	36	29	33	30	55	48	47	49	50	57	41	51	47	31	33	52	42	49	47	..	40.8
Elkins	Maximum	70	71	60	74	55	38	37	42	44	44	58	66	46	43	65	62	52	66	63	60	70	82	74	50	59	55	66	47	58	70	..	58.2
	Minimum	42	42	35	44	23	21	26	28	28	20	22	32	25	27	27	48	44	38	48	52	48	38	43	41	27	37	47	39	41	48	..	36.0
Fairmont§	Maximum	77	74	64	76	38	39	43	45	51	56	63	70	37	49	68	62	54	67	68	66	74	86	68	60	60	59	68	50	64	72	..	60.9
	Minimum	43	50	35	45	38	21	27	29	25	24	25	32	29	30	35	42	48	40	47	52	58	42	49	46	29	38	49	42	41	47	..	38.6
Glenville	Maximum	78	76	71	81	81	42	46	51	55	53	66	69	64	53	72	71	56	69	67	61	76	89	90	66	62	61	70	63	63	75	..	66.6
	Minimum	46	55	27	44	29	22	31	35	28	22	23	33	29	32	27	54	48	44	49	50	55	39	50	47	30	38	51	41	44	45	..	38.9
Grafton	Maximum	79	75	66	78	73	40	42	45	49	48	64	71	61	61	68	63	55	66	65	64	74	88	79	57	59	60	71	66	65	72	..	64.1
	Minimum	..	..	..	..	..	..	..	26	26	22	23	35	28	29	29	52	46	40	49	52	59	41	50	45	29	35	51	42	40	48	..	39.0
Lost Creek	Maximum	74	75	71	77	75	39	43	47	50	52	63	68	60	48	68	65	54	65	65	62	72	85	81	59	56	57	68	57	62	70	..	62 9
	Minimum	34	54	37	55	30	20	31	32	25	22	21	32	29	31	27	52	46	44	48	49	58	37	51	45	25	37	52	39	42	46	..	38.4
Mannington	Maximum	75	74	62	71	67	37	44	41	46	47	58	68	61	48	66	65	53	64	64	61	72	82	80	57	56	58	67	57	63	69	..	61.1
	Minimum	39	55	29	44	30	20	31	29	22	21	22	32	29	32	26	49	46	37	46	49	56	38	46	43	27	33	51	38	40	48	..	36.9
Morgantown	Maximum	..	..	..	..	65	37	43	44	45	46	56	73	66	47	66	67	55	66	64	63	73	84	85	55	56	58	68	61	64	71	..	60.7
	Minimum	53	46	35	45	27	22	30	26	27	22	25	47	27	30	35	51	44	38	45	54	58	47	50	42	30	42	45	41	42	49	..	39.2
New Cumberland	Maximum	72	75	62	61	58	35	42	45	41	45	65	65	48	50	60	..	49	58	63	58	70	81	69	58	55	55	65	56	65	65	..	58.3
	Minimum	42	54	38	52	28	20	29	23	26	18	20	35	25	29	38	..	41	30	35	48	55	39	46	40	25	31	46	41	40	45	..	35.8
New Martinsville	Maximum	68	72	60	66	65	35	40	48	42	43	58	63	64	53	68	60	54	58	56	68	74	85	81	58	60	58	60	57	61	68	..	60.2
	Minimum	44	53	34	44	30	24	31	33	24	25	25	37	29	33	31	48	46	39	46	46	57	42	47	44	30	38	53	42	42	50	..	38.9
Parkersburg	Maximum	71	71	63	75	55	39	47	47	46	44	62	68	38	50	69	65	52	61	62	61	72	85	66	56	58	57	66	51	64	71	..	59.7
	Minimum	56	46	38	44	30	26	32	34	31	28	30	38	28	35	38	52	47	47	48	54	55	49	50	46	37	44	48	42	45	47	..	41.5
Parsons	Maximum	75	60	62	68	68	26	33	43	45	50	61	70	59	46	66	53	50	68	63	67	71	84	76	62	55	56	68	54	61	72	..	59.7
	Minimum	36	47	37	46	26	22	23	26	18	19	28	29	27	30	22	40	44	35	46	46	53	36	48	32	25	31	43	33	33	46	..	34.2
Philippi	Maximum	72	72	55	76	73	37	38	42	47	47	59	70	54	46	65	62	54	64	65	63	71	83	89	54	56	57	68	56	60	70	..	60.8
	Minimum	52	50	38	43	26	21	22	22	22	21	21	46	26	29	32	52	44	41	47	53	56	45	49	42	29	39	52	40	41	48	..	38.3
Pickens	Maximum	70	64	62	72	64	36	33	41	47	46	61	61	54	45	65	61	55	68	53	65	62	82	69	50	60	54	52	50	56	52	..	57.0
	Minimum	44	27	43	43	20	18	22	25	25	19	22	36	22	22	25	49	40	35	48	45	44	40	41	37	26	39	45	36	35	39	..	33.7
Terra Alta	Maximum	73	69	57	56	48	32	32	32	36	40	52	62	55	41	58	60	51	65	55	55	66	80	74	55	55	49	65	58	59	65	..	55.2
	Minimum	40	45	33	39	21	16	22	21	18	16	19	36	20	24	27	49	41	34	42	47	50	41	44	36	25	35	40	35	35	44	..	33.2
Wellsburg	Maximum	74	74	62	67	68	37	40	37	40	44	56	69	50	57	56	63	54	61	65	62	71	84	76	59	55	56	67	54	63	68	..	59.6
	Minimum	38	51	37	39	29	23	30	26	24	18	21	36	23	23	30	38	43	33	43	44	56	38	45	42	26	30	49	42	43	46	..	35.5
Weston	Maximum	72	74	63	77	75	40	43	47	51	50	61	69	60	48	68	66	55	64	67	61	73	84	81	59	57	59	68	59	63	72	..	62.9
	Minimum	48	54	34	43	29	23	31	34	32	25	26	36	29	31	31	53	48	46	47	51	58	42	54	45	30	42	54	43	43	49	..	40.4
Wheeling§	Maximum	78	77	70	71	37	38	40	41	44	50	63	71	45	53	67	65	50	62	68	66	75	87	67	59	60	57	64	56	66	71	..	60.6*
	Minimum	44	49	38	43	35	22	30	26	20	23	25	35	27	30	35	42	45	37	38	40	55	42	45	43	30	35	44	43	42	50	..	37.1
Southern Division.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Bluefield	Maximum	66	66	64	73	68	44	43	49	52	52	52	58	58	48	64	64	61	61	62	64	73	81	81	78	58	52	65	65	51	62	..	61.2
	Minimum	58	52	43	50	24	21	29	36	35	38	27	35	22	25	30	52	50	42	50	48	53	46	54	44	40	33	48	37	38	42	..	40.1
Charleston	Maximum	75	73	71	59	56	51	49	55	57	54	68	71	56	58	75	65	68	76	65	72	79	80	79	65	61	63	71	59	59	60	..	65.0
	Minimum	38	39	32	36	35	34	32	35	33	29	37	37	30	30	33	46	51	51	51	55	52	54	50	48	36	46	50	40	38	38	..	40.5
Gary§	Maximum	70	73	67	72	37	51	47	55	56	59	70	67	35	52	71	70	65	79	74	71	76	87	75	..	64	64	65	69	56	76	..	64.6
	Minimum	32	49	33	37	36	24	32	33	39	28	28	37	30	29	28	36	46	40	48	54	60	43	52	47	..	34	34	49	43	32	..	38.4
Green Sulphur Spgs.	Maximum	70	72	64	77	64	41	46	53	55	53	69	62	56	55	70	66	58	72	69	61	75	84	76	60	62	54	69	60	58	77	..	63.6
	Minimum	31	50	28	47	29	21	31	32	34	24	25	31	28	29	25	42	45	40	49	50	54	39	52	45	30	46	47	39	32	42	..	37.2
Hinton§	Maximum	60	75	68	80	46	33	37	58	62	55	75	63	38	55	75	66	59	75	67	61	80	84	78	56	61	52	70	58	62	78	..	63.0
	Minimum	30	45	30	30	43	22	32	32	36	30	27	30	33	30	28	29	43	43	43	50	50	40	42	46	34	36	47	42	32	34	..	36.3
Holcomb	Maximum	69	71	65	76	68	37	41	47	51	47	63	63	58	48	69	65	59	74	71	61	72	86	81	65	61	53	70	55	58	75	..	62.5
	Minimum	27	50	26	27	25	18	27	25	30	21	24	24	25	27	26	47	45	35	44	51	54	37	50	42	27	38	49	39	29	40	..	34.3
Huntington §	Maximum	70	73	73	80	37	42	50	55	59	55	70	73	45	57	74	67	51	75	62	64	80	91	69	63	58	62	69	52	58	77	..	63.8
	Minimum	42	56	33	43	34	29	33	34	37	30	29	35	30	30	33	49	49	48	50	52	57	47	53	49	40	46	49	42	40	49	..	41.6
Lewisburg	Maximum	63	70	65	72	65	40	42	50	52	50	66	61	58	49	69	61	56	71	65	54	72	81	73	63	59	51	68	57	57	74	..	61.1
	Minimum	42	51	28	44	26	19	29	28	32	28	23	36	27	26	23	42	41	41	46	47	50	37	53	42	28	44	44	40	39	38	..	36.5
Marlinton	Maximum	56	66	60	68	56	34	34	46	46	44	58	58	44	42	62	54	52	66	60	52	68	76	66	50	58	46	62	50	54	66	..	55.1
	Minimum	48	42	24	40	22	16	24	24	26	20	16	18	24	24	20	38	38	42	40	48	48	30	50	34	22	40	40	36	30	36	..	32.0
Point Pleasant	Maximum	71	74	69	76	65	40	49	54	53	52	66	73	60	54	72	67	61	68	62	61	77	88	83	62	58	58	70	56	65	75	..	64.6
	Minimum	52	53	34	44	29	25	30	34	29	26	25	42	29	31	35	56	48	47	48	53	58	45	51	47	36	44	54	42	39	49	..	41.2
Powellton	Maximum	72	76	70	82	71	44	47	52	56	51	68	66	62	53	76	68	61	80	73	70	78	90	85	70	62	61	77	62	56	81	..	67.3
	Minimum	51	55	32	48	30	25	34	35	35	27	28	39	30	33	31	54	46	44	50	53	59	43	54	47	54	47	52	44	38	45	..	42.1
Robertsburg§	Maximum	72	72	69	78	36	42	48	51	53	50	68	70	38	52	71	63	53	70	60	67	75	78	65	58	58	59	67	53	61	75	..	61.1
	Minimum	35	54	29	38	35	27	31	30	29	28	24	33	29	28	32	47	49	48	48	51	56	43	49	48	36	43	49	43	36	48	..	39.2
Ryan	Maximum	70	74	67	78	60	44	45	56	53	48	65	68	52	55	72	67	55	70	70	68	76	86	78	58	58	60	68	58	60	77	..	63.9
	Minimum	46	48	24	45	29	20	29	33	26	20	21	36	27	30	26	42	48	46	47	58	57	38	48	45	29	49	51	41	36	47	..	38.1
Spencer §	Maximum	70	74	69	80	80	40	48	52	52	52	69	57	36	45	61	54	62	64	67	67	78	88	60	59	60	62	71	52	62	71	..	62.1
	Minimum	41	55	30	34	36	36	24	32	30	22	25	30	29	28	31	41	50	47	50	50	50	43	50	45	32	43	46	47	41	44	..	38.7
Sutton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Union	Maximum	70	75	76	74	70	41	45	53	58	55	56	57	51	53	57	70	62	70	72	59	75	84	82	73	70	67	69	66	65	77	..	65.1
	Minimum	32	35	34	31	29	21	30	32	38	30	31	32	24	26	30	26	43	40	39	48	52	38	52	44	40	28	44	40	33	38	..	35.3
White Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Williamson§	Maximum	66	70	66	75	38	50	47	52	51	51	68	66	40	50	68	64	63	78	66	76	75	85	71	56	56	65	69	55	55	75	..	62.2
	Minimum	37	55	35	37	37	30	30	35	41	31	31	35	32	30	32	35	52	45	50	53	62	48	50	50	40	45	49	43	37	40	..	40.6

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


NO PRECIPITATION
NO PRECIPITATION
Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.

NWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS
DEC 21 1920

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

MAY, 1920

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
NOVEMBER 8, 1920

Departure of the Mean Temperature from the Normal, May, 1920.


-3°
-3°
+3°
+3°
-3°
-3°
-3°
-3°
-3°
-6°
-3°
+3°
+3°
+3°
+
-
+
-
+
-

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVIII. PARKERSBURG, W. VA., MAY, 1920. No. 5.

GENERAL SUMMARY.

The past month was one of the five coolest and driest of May record. The temperature was below the normal the greater part of the time, while most of the rainfall was received during four periods, each period covering portions of two days. Only three stations—Creston, Glenville, and Green Sulphur Springs—had rainfalls above the normal. The rainfall at Glenville on the 25th, 3.36 inches, was probably the heaviest of 24-hour record. Considerable damage resulted to gardens, roads, and small buildings. The storm was local. Heavy to killing frosts, attending temperatures near or slightly below freezing in most districts, occurred early in the month and on the 15th. The low temperatures on the 15th killed early potatoes and caused slight damage to wheat and much damage to fruit, especially in the northern and mountain counties. While the damage in the fruit growing counties seemed to be slight, much fruit dropped during the last decade. The ground was too cold for germination and growth and crops made unsatisfactory progress. Farm work was about ten days late at the close of the month.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.08 and 30.07 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.51 inches on the 16th, and 29.76 inches on the 13th. Elkins, 30.53 inches on the 16th, and 29.66 inches on the 13th.

TEMPERATURE.

The monthly mean for the State, 47 stations reporting, was 58.9°. The departure from the normal for 41 stations having ten or more years of record was —3.3°. The first half of the month was unseasonally cool, except the 6-7th and 10-12th, with the lowest temperatures occurring generally on the 15th, when the early morning readings ranged from 24° to 37°, giving light to killing frosts. From the 17th to the close of the month the daily readings were near the normal or somewhat above, with the highest temperatures occurring generally on the 30th or 31st.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 69 per cent; 8 p. m., 54 per cent. The May averages for the same hours for the past 30 years are 75 and 64 per cent, respectively. Elkins, 8 a. m., 78 per cent; 8 p. m., 54 per cent. The May averages for Elkins for the same hours for the past 20 years are 79 and 65 per cent, respectively.

PRECIPITATION.

The monthly mean for the State, 63 stations reporting, was 2.94 inches. The departure from the normal for 43 stations having ten or more years of record was —1.33 inches. The rainfall was heaviest over the central counties, especially over the upper Little Kanawha Basin, and lightest over the northern and eastern counties. Practically all the rainfall was received on the 7-8th, 11-13th, 18-20th, and 24-25th, with the greatest amounts recorded on the 13th, 20th, and 25th. Traces of snow were received at Terra Alta, Preston County, and Stony River Dam, Grant County.

HAIL.

Light hail fell at Romney on the 21st and a destructive hail storm, covering a path about four miles wide, passed from the Elk River above Webster Springs to Hackers Valley, about 18 miles. Much damage resulted to fruit, fruit trees, corn, and vegetables. In some places the rain piled up hail stones about four feet high. Some of the stones were over an inch in diameter.

WIND.

The average wind velocity at Parkersburg was 4.7 miles per hour, or 0.6 mile below the May average for the past 30 years. The average at Elkins was 4.8 miles per hour, or 1.6 miles above the May average for 19 years. The highest velocity at Parkersburg was 22 miles per hour from the southwest on the 19th, and at Elkins 28 miles per hour from the northwest on the 1st.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 59 per cent of the possible amount, or 5 per cent above the May average for 22 years. The average at Elkins was 52 per cent, or 2 per cent below the May average for 20 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Brandywine, 27th and 28th; Burlington, 26th and 27th; Elkins, 16th, 27th, and 28th; Evans, 26th; Grafton, 15th; Hinton, 26th and 27th; Marlinton, 14th, 22d, 23d, 26th, 27th, 28th, 29th, 30th, and 31st; Moundsville, 11th; Philippi, 12th; Pickens, 14th; Romney, 13th, 25th, 26th, 27th, and 28th; Rowlesburg, 15th and 27th; Stony River Dam, 12th and 25th; Wheeling, 7th and 8th.

Halo, lunar: Parkersburg, 28th.

Halos, solar: Elkins, 7th, 11th, 17th, 22d, and 29th; Parkersburg, 17th; Ryan, 23d; Wheeling, 30th.

Thunderstorms (dates and number of stations reporting): 1st, 1; 8th, 2; 12th, 6; 13th, 2; 19th, 2; 20th, 1; 21st, 2; 22 1; 24th, 5; 25th, 3; 30th, 3; 31st, 3.

COMPARATIVE DATA FOR MAY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	57.2	..	..	3.18	....	....	....	..	..	..
1892	62.2	96	32	5.04	....	....	....	..	..	..
1893	59.5	92	30	4.51	6.41	1.83	....	12	9	10
1894	62.1	100	28	4.44	9.40	2.17	....	16	9	6
1895	61.6	105	20	2.60	6.31	0.79	....	12	11	8
1896	68.3	95	33	3.01	5.92	0.65	....	11	13	7
1897	57.6	90	23	4.60	7.06	2.17	....	13	10	8
1898	63.0	94	28	4.51	6.15	2.76	....	13	10	8
1899	64.1	96	35	5.17	7.68	3.17	....	11	11	9
1900	62.5	98	24	2.99	6.75	0.35	....	14	9	8
1901	61.8	96	24	6.15	8.88	2.50	....	11	10	10
1902	65.2	98	25	3.17	6.09	1.30	....	14	11	6
1903	64.3	95	20	3.03	6.24	0.89	T.	18	9	4
1904	61.8	98	25	3.55	5.80	1.54	T.	12	11	8
1905	61.2	96	26	4.95	7.96	1.90	0.0	12	10	9
1906	62.7	98	22	2.59	6.89	0.39	T.	15	9	7
1907	59.0	93	24	3.86	6.37	1.38	T.	12	10	9
1908	63.4	96	28	6.19	11.45	2.73	0.1	9	12	10
1909	60.8	93	21	3.82	6.05	1.80	0.1	14	9	8
1910	57.9	96	19	3.92	5.87	1.55	0.0	11	10	10
1911	66.0	100	22	1.46	6.35	0.03	0.0	20	8	3
1912	63.3	94	31	3.93	7.50	1.16	0.0	15	8	8
1913	61.6	95	19	5.16	8.86	1.89	0.0	14	8	9
1914	62.4	100	24	1.96	3.75	0.55	0.0	18	8	5
1915	61.1	92	29	4.22	6.85	2.36	0.0	10	9	12
1916	64.0	97	28	3.58	6.60	0.90	T.	14	9	8
1917	55.5	95	25	4.88	5.15	2.45	T.	11	8	12
1918	66.7	97	25	4.34	10.28	1.85	T.	15	9	7
1919	61.5	100	30	5.25	10.71	2.75	0.0	12	7	12
1920	58.9	95	24	2.76	6.97	1.08	T.	16	6	9
Means and extremes ..	62.0	105	19	3.96	11.45	0.03	T.	13	10	8

Climatological Data for May, 1920.

Stations.	Counties.	Elevation, Feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	19	50.8	− 6.4	82	30	24	16	39	1.57	−2.80	0.41	0	9	15	5	11	w.	G. C. Dixon.
Brandywine	Pendleton		4	56.0		84	30	27	2	41	1.59		1.20	0	6	18	5	8	n.	Elmer Keister.
Burlington	Mineral	875	26	56.5	− 5.0	84	31	29	16	41	1.08	−3.03	1.08	0	1	13	15	3	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	31								1.85	−1.79	0.90	0	3				w.	S. W. Lightner.
Martinsburg	Berkeley	435	28	59.2	− 3.2	86	28	35	2†	37	2.68	−1.05		0	8	20	4	7	e.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	24	60.7	− 2.7	88	28	30	16	48	1.83	−1.76	0.82	0	6	30	0	1		M. S. Henkel.
Piedmont	Mineral	919	7	56.2		84	31	31	16	40	2.38		0.75	0	7	15	12	4	se.	C. A. Suter, Jr.
Romney	Hampshire	824	22	59.3[b]	− 3.9	88[b]	28†	29[b]	3†	47[b]	2.92	−0.76		0	7	11	12	8		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	21	54.7	− 6.1	85	31	28	3†	44	1.35	−1.92	0.80	0	5	21	3	7	e.	J. M. Mallow.
Wardensville	Hardy	1,200	2								1.47			0						Luther F. Sutton.
Averages and	extremes			56.7	− 4.6	88	28†	24	16	48	1.87	−1.87	1.20	0	6	18	7	6	w.	
Northern Division.																				
Bens Run	Pleasants	622	18	61.6	− 1.8	90	30†	34	3†	38	2.82	−1.80	0.88	0	6	26	1	4		J. D. Riggs.
Brandonville	Preston	1,809	9																	W. H. Miller.
Buckhannon	Upshur	1,411	23	58.6	− 3.4	85	30	31	15	36	3.84	−0.70	1.13	0	5	24	2	5		H. A. Darnall.
Cortland	Tucker	3,300	4																	Samuel Harmon.
Creston	Wirt	701	18	61.2	− 2.4	92	30	32	15	45	6.31	+2.52	2.46	0	7	18	0	13	sw.	J. M. Reed.
Davis	Tucker	3,093	11																	Branson Harper.
Elizabeth	Wirt	646	8								2.72		1.47	0	7					E. D. Ball.
Elkins	Randolph	1,947	19	56.0	− 3.1	84	31	29	15	39	2.19	−1.79	1.32	0	7	7	12	12	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	14	60.6	− 1.9	95	31	30	15	44	2.15	−1.90	1.08	0	7	23	0	8	w.	F. P. Hall.
Glenville	Gilmer	738	26	61.6	− 1.9	93	31	29	15	47	6.97	+2.81	3.36	0	9	22	5	4	w.	Howard R. Brannon.
Grafton [b]	Taylor	1,000	27	58.9	− 3.3	93	31	30	15†	44	1.83	−2.54		0	6	16	9	4	e.	W. C. Byers.
Lost Creek	Harrison	1,026	22	58.6	− 2.6	89	30†	27	15	43	2.16	−2.12	1.05	0	6	18	2	11	w.	Allen Smith.
Mannington	Marion	974	17	57.5	− 3.7	85	30†	28	15	41	1.64	−2.55	1.19	0	5	17	5	9	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	27	60.7	− 1.8	90	31	31	15	36				0		7	16	8		Prof. E. L. Andrews.
Moundsville	Marshall	642	17	59.9	− 3.4	92	30	31	15	43	1.90	−1.51	0.85	0	3	11	17	3	w.	G. W. Wright.
New Cumberland	Hancock	987	22																	M. F. Smith.
New Martinsville	Wetzel	634	26	60.4	− 3.2	87	31	31	15	40	1.75	−2.06	0.90	0	4	22	4	5	n.	Wm. Ankrom.
Parkersburg	Wood	638	33	61.4	− 1.8	88	31	34	15	33	1.64	−1.82	1.10	0	7	10	13	8	nw.	U. S. Weather Bureau.
Parsons ††	Tucker	1,656	20	55.5	− 3.7	90	29†	26	4	50				0		20	7	4		J. W. Swisher.
Philippi	Barbour	1,149	23	59.2	− 2.6	88	31	30	15	37	2.48	−1.82	0.85	0	8	11	13	7	w.	Prof. Vernon E. Wood
Pickens	Randolph	2,697	17	55.8	− 3.2	86	31	26	15	40	4.66	−0.66	1.14	0	9	15[a]	5[a]	10[a]	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	33								2.91	−2.49	1.20	0	7				e.	J. F. Pierce.
Saint Marys	Pleasants	577	11								3.09	−0.84	1.30	0	8				w.	Wm. Hughes.
Smithfield	Wetzel	835	14	58.8	− 2.4	89	30	28	15	48	2.16	−2.15	1.00	0	7	25	3	3	se.	G. M. Whisler.
Stony River Dam	Tucker		0	56.9[a]		76[a]	28	34	14	26[a]	3.52		1.08	T.	10	9[a]	5[a]	16[a]	w.	A. C. Becker.
Terra Alta	Preston	2,612	19	54.5	− 4.7	83	30	29	3†	34	2.57	−2.57	0.75	T.	8	12	7	12	w.	W. J. Grimm.
Wellsburg	Brooke	1,225	19	57.4	− 3.2	90	30†	27	15	47	1.32	−2.24	0.38	0	8	22	4	5	w.	George P. Pfister.
Weston	Lewis	1,026	24	60.0	− 3.2	87	30	31	15	37	3.93	−0.40	1.03	0	8	11	12	8	n.	Weston State Hospital
Wheeling	Ohio	645	33	61.2	− 1.8	92	30†	32	15	43	2.11	−1.39	1.00	0	8	18	5	8	s.	Miss M. B. Forsyth.
Averages and	extremes			59.1	− 2.8	95	31	26	15	50	2.90	−1.33	3.36	T.	7	16	7	8	w.	
Southern Division.																				
Alum Creek	Kanawha										2.24		1.10	0	4					
Bancroft	Putnam	574	16	60.2	− 3.7	86	31	34	15	40	2.08	−2.19	0.73	0	9	14	4	13	sw.	R. E. Dent.
Bluefield [b]	Mercer	2,558	25	57.0	− 5.1	80	24	30	15	32	3.15	−0.51	0.75	0	10	13	8	8		Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	5								4.02		1.00	0	8	14	0	17	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	17	62.8	− 3.3	89	27†	35	15	36	2.71	−1.36	1.10	0	7	16	4	11		C. V. Lewis.
Clay	Clay	706	4								3.62		1.20	0	8					Prof. E. H. Knabenshue.
Cuba	Jackson	650	18	60.2	− 3.3	88	31	31	15	38	2.60	−0.81	1.00	0	8	17	9	5	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	4								3.08		1.22	0	8					Lockmaster.
Dam 20 O. R.	Wood	551	4								2.79		1.14	0	6					Lockmaster.
Dam 22 O. R.	Jackson	538	5								3.18		1.44	0	7					Lockmaster.
Dam 26 O. R.	Mason	505	4								2.00		0.90	0	4					U. S. Engineer Office.
Evans	Jackson	606	8	60.8		85	31	35	15	32	2.75		1.75	0	5	18	3	10		B. F. Sayre.
Gary	McDowell	1,426	4	59.0		82	23	31	15	36	4.27		1.40	0	10	12	0	19		U. S. Coal & Coke Co.
Gassaway	Braxton																			W. H. Gwinn.
Green Sulphur Spgs	Summers	1,600	24	58.5	− 3.0	84	23†	27	15	40	3.91	+0.40	0.81	0	9	14	4	13	w.	H. A. Hays.
Hinton	do	1,450	23	59.6	− 4.4	86	23	31	15	43	2.92	−0.88	1.12	0	11	12	1	18	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	8	57.0		86	30	27	4†	43	4.41		0.99	0	12	13	5	13		W. C. Williams.
Huntington	Cabell	538	26	63.6	− 1.3	89	23†	36	15	39	2.89	−1.28	1.59	0	8	17	1	13	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	1								3.06		1.30	0	8					J. O. Brown.
Kaytord	Kanawha	1,335	4								4.07		1.42	0	8					Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	20	57.3	− 3.5	83	29	27	15	38	2.50	−1.22	0.74	0	9	16	6	9	nw.	Geo. T. Argabate.
Logan	Logan	687	17																	W. C. Flanagan.
Madison	Boone	704	14																	S. E. Bradley.
Marlinton	Pocahontas	2,131	21	52.6	− 5.7	82	30	24	3†	38	3.05	−1.01	1.15	0	8	5	19	7	sw.	S. L. Brown.
Point Pleasant	Mason	553	27	62.2	− 3.1	92	31	33	15	41	2.64	−0.92	1.34	0	5	16	4	11		W. D. Holmes.
Powellton	Fayette	933	24	62.0	− 2.0	91	31	32	15	43	3.47	−0.66	0.92	0	7	21	5	5		Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	4								3.41			0						Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	4								1.89		0.85	0	3				nw.	Wm. B. Hill.
Robertsburg	Putnam	574	20	61.6[a]	− 2.4	92[a]	31	33[a]	15	46[a]	1.41	−2.31	0.55	0	5	14	4	13		E. C. Brace, Jr.
Ryan	Roane	709	17	58.9	− 3.5	88	31	27	15	45	2.99	−0.75	1.02	0	9	17	5	9		Wm. E. Ryan.
Sharples	Kanawha		0								3.02		0.70	0	10					C. E. Rippetoe.
Spencer ††	Roane	784	16	60.8[a]	− 1.9	89[a]	30	31	15	38[a]	2.83	−0.84	1.08	0	6	11	15	5		A. M. McKown.
Sutton	Braxton	839	14																	Lawrence Freeman.
Union	Monroe	2,250	16	58.4	− 2.5	85	28†	27	15	40	1.90	−0.91	0.75	0	5					Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	10																	J. M. Ayres.
Williamson	Mingo	660	20	61.5	− 4.1	84	31	37	15	38	2.35	−1.53	0.68	0	10	19	6	6	w.	J. F. Keyser.
Averages and	extremes			59.6	− 3.4	92	31	24	3†	46	2.94	−1.06	1.75	0	8	15	5	11	w.	
State averages and	extremes			58.9	− 3.3	95	31	24	3†	50	2.76	−1.33	3.36	T.	7	16	6	9	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

' Approximated by the observer.

Daily Precipitation for May, 1920.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac	.41							.01				.21	.38	.29					T.	.16	.04			.05	.02							1.57
Brandywine	....do												*	1.20						.12	.13	.12			.02								1.59
Burlington	....do												1.08	T.						T.	T.	T.			T.		T.						1.08
Harpers Ferry ‖‖	....do										.55			.90	T.							T.				.40							1.85
Martinsburg	....do								.10				*	*	1.27					*	.05				.17		1.09						2.68
Moorefield	....do	.40											.19	.82							.28	.09			.05								1.83
Piedmont	....do							T.	T.				.75	.46	.60					.08	.21	.27			.01	T.	T.		T.				2.38
Romney	....do	.67							T.				*	.93					T.	T.	T.	.43			.27		.57	.05					2.92
Upper Tract	....do	.15											.20	.80					T.	.10	.10				T.								1.35
Wardensville	....do	*					*	*	*				*	*	1.12						.11	.02			*	*	.22						1.47
Northern Division.																																	
Bens Run	Ohio												.88	.67						.17	.59				.43	.08							2.82
Brandonville ‖‖	Monongahela																																
Buckhannon	....do	.90											1.13	.34							.47					1.00							3.84
Cortland ‖‖	Monongahela																																
Creston ‖‖	Little Kanawha	2.46											.75	1.82						.21	.58	.06			T.	.43							6.31
Davis ‖‖	Monongahela																																
Elizabeth	Little Kanawha	.53												1.47						.16	.12	.01				.41	.02						2.72
Elkins***	Monongahela						T.	T.	.04			.17	1.17	.31					T.	.34	.15	T.			.01						T.		2.19
Fairmont ‖‖	....do	.33											.06	1.08	T.					.15	.46	.05				.02							2.15
Glenville ‖‖	Little Kanawha	1.22							.03				.46	1.10	.04				T.	.10	.38	.28			3.36								6.97
Grafton	Monongahela											*	*	1.21						*	*	.62			T.								1.83
Lost Creek	....do	.28										T.	1.05	.14					T.	.06	.30	T.			T.	.33					T.		2.16
Mannington	....do	.03											.50	.69						.08	.34				T.								1.64
Morgantown	....do																																
Moundsville	Ohio												.85	.60							.45												1.90
New Cumberland	....do																																
New Martinsville	....do												.90	.70						.05	.10												1.75
Parkersburg ***	Ohio								T.			.06	1.07	T.				T.	.14	.19	.14				.03							.01	1.64
Parsons	Monongahela																																
Philippi	....do	.45	.01										.40	.85		.02				.15	.53	T.									.07	T.	2.48
Pickens	....do								.60				.38	1.12	.16					.15	.21	.30				1.14					.10		4.66
Rowlesburg ‖‖	....do	.64											.22	.98	T.					.18	.38	.32	.19										2.91
Saint Marys ‖‖	Ohio	.40											.38	1.30	.03					.20	.45				.05	.28							3.09
Smithfield ‖‖	Fishing Creek	.37											.25	1.00	.01					.06	.46				.01								2.16
Stony River Dam‖‖		1.08											.08	.94	.18					.08		.48	.48			.12	.04	.04					3.52
Terra Alta	Monongahela	.57										T.	.21	.75	.07					.23	.59	.10			.05								2.57
Wellsburg	Ohio	.10						T.		T.	.04		.32	.30					T.	.06	.06	.32			.12								1.32
Weston	Monongahela	.91											.84	.66						.14	.31	.04			.05	.98							3.93
Wheeling ‖‖	Ohio	.26								T.			.14	1.09	T.				.01	.08	.22	.13				.27							2.11
Southern Division.																																	
Alum Creek ‖‖								.45	T.				1.10	.65	T.				T.		.04	T.											2.24
Bancroft ‖‖	Great Kanawha	.03							.01				.36	.50	.04				.31	.09	T.				.73	.01							2.08
Bluefield	....do	.12	.30					.35	.75					T.	23				T.	.15	.35	.10			.20	.60							3.15
Camden-on-Gauley‖‖	....do							.82				.20	.80	.20					.10			.80			1.00						.10		4.02
Charleston ‖‖	....do	.15							.30				.40	1.10	.38					.20	T.					.18							2.71
Clay ‖‖	....do								.06				.19	1.18	.25					.14	.50	.10			1.20								3.62
Cuba	Sand Creek								T.			.05	1.00	.50					.05	.15	.05			.20	.60							T.	2.60
Dam 19 O. R. ‖‖	Ohio	.64											.18	1.22	.01				T.	.24	.65	.02			T.	.12							T.	3.08
Dam 20 O. R. ‖‖	....do	.45											.41	1.14						.33	.12					.34								2.79
Dam 22 O. R. ‖‖	....do	.30											.55	1.44						.15	.12	.15				.47								3.18
Dam 26 O. R. ‖‖	....do	.30											.45	.90						.35														2.00
Evans	Ohio											T.	1.75	.36					.22	T.	T.	T.			.22	.20							2.75
Gary ‖‖	Big Sandy	.40		.04				.11	1.18	.05				.62						.11	.22	.14				1.40							4.27
Gassaway ‖‖	Great Kanawha																																
Green Sulpr. Spgs.	....do							.64	.34				.26	.27					.34	.20	.68	.37			.81	T.							3.91
Hinton ‖‖	....do	.04						.02	1.00					.26	.04					.04	.22	.10	.08			1.10	.02						2.92
Holcomb	....do	.05						.15	.55				.81	.99	.36				.04	.28	.29	.05			.52	.32							4.41
Huntington ‖‖	Ohio	.08							.04				.78	.72						.36	.28	.02				.52							2.80
Kanawha Falls‖‖	Great Kanawha	.29							.59				.15	1.30	.20					.20		.15				.18							3.06
Kayford ‖‖	....do	.04							.76				T.	1.42	.24					.24	.26	.29	T.			.82							4.07
Lewisburg	....do	.07						T.	.74				.27	.11					T	.11	.36	.06			.52	.26							2.50
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	....do							.24	.41				1.15	.10						.35	.46				.16	.18							3.05
Point Pleasant	Ohio	.06											1.34	.48						.56					.20								2.64
Powellton	Great Kanawha							.28	.52				.90	.92					.24	T.	T.				.10	.51							3.47
Raleigh ‖‖	....do								.77				T.	.19						*	*	*				2.45							3.41
Renick ‖‖	....do								.58					.46												.85							1.89
Robertsburg ‖‖	....do	.25											.37	.55						.18						.06							1.41
Ryan	....do	.11					T.					.14	.61	.22					.03	.25	.22				.39	1.02							2.99
Sharples ‖‖	Coal River							.10	.63				.18	.40	.05					.40	.15	.01	.70			.40								3.02
Spencer ‖‖	Little Kanawha	.45												.88						.20	.12	.10				1.08	T.						2.83
Sutton	Great Kanawha																																
Union	....do								.75											.10	.15				.50	.40							1.90
White Sulphur Spgs.	....do																																
Williamson ‖‖	Big Sandy	T.		.02					.68				T.	.32	.03					.36	.08	.02	.10			.64						.10	2.35

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for May, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division																																	
Bayard	Maximum	45	50	48	53	58	60	58	55	52	60	70	61	56	50	58	51	62	64	67	68	62	63	55	50	60	75	79	79	80	82	81	61.7
	Minimum	34	36	25	34	38	44	43	41	32	39	48	42	40	32	28	24	34	48	50	50	48	44	39	36	38	41	50	48	41	46	42	39.8
Brandywine	Maximum	58	55	60	65	68	70	70	69	70	78	82	75	62	62	61	66	70	70	72	75	78	77	80	68	68	65	75	80	83	84	82	70.9
	Minimum	31	27	35	29	30	31	48	49	34	38	41	46	45	46	28	28	34	49	54	50	48	40	42	48	42	43	44	49	50	44	49	41.0
Burlington	Maximum	60	61	60	62	63	70	73	70	71	79	82	68	54	55	59	61	71	74	71	70	77	78	76	64	66	65	79	83	80	83	84	70.0
	Minimum	44	31	31	32	31	32	43	50	37	46	45	47	48	45	31	29	33	50	55	55	55	43	42	51	53	43	47	46	47	42	50	43.0
Martinsburg§	Maximum	63	64	65	65	67	72	70	79	74	84	85	58	55	57	63	69	72	77	75	76	79	82	76	60	68	72	83	86	83	85	84	72.2
	Minimum	45	35	35	38	37	35	38	49	42	51	51	51	48	47	39	36	38	41	50	56	50	53	50	54	54	45	51	52	55	52	52	46.1
Moorfield	Maximum	64	65	66	65	70	79	82	76	75	83	86	82	62	60	70	72	80	79	76	69	82	83	82	74	77	83	84	88	84	87	87	76.5
	Minimum	46	32	31	32	32	36	40	52	38	43	44	57	48	46	31	30	32	54	54	57	56	44	43	62	54	46	54	47	49	44	57	44.9
Piedmont	Maximum	57	58	60	62	63	70	68	66	70	79	77	65	50	50	58	66	70	72	70	69	74	75	74	61	64	68	78	83	80	82	84	68.5
	Minimum	42	32	32	33	33	35	46	51	41	47	46	47	40	44	32	31	36	52	55	56	57	46	44	52	51	46	48	43	45	46	54	44.0
Romney	Maximum	75	68	65	65	67	73	77	74	75	..	..	80	56	55	64	76	76	79	80	84	85	80	78	69	69	78	83	88	88	86	88	75.2
	Minimum	44	32	29	32	31	32	45	44	45	..	..	47	47	45	30	29	35	51	54	60	55	43	43	53	52	48	43	47	48	44	52	43.4
Upper Tract	Maximum	68	62	61	65	58	71	71	68	70	75	80	70	52	58	60	68	71	71	70	71	75	78	76	69	63	66	75	84	84	84	85	70.3
	Minimum	42	33	28	29	30	33	46	48	38	36	45	45	46	29	28	29	30	42	49	50	41	41	40	42	41	42	40	40	42	43	43	39.1
Wardensville	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	61	56	68	68	58	67	68	..	..	..	72	74	65	78	75	72	64	..	67.6
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	28	38	42	40	40	34	..	..	..	47	45	48	53	46	42	52	41.9
Northern Division.																																	
Bens Run	Maximum	63	65	61	67	71	76	74	73	75	81	81	65	60	54	65	75	77	85	87	74	80	83	87	71	74	82	86	86	84	90	90	75.5
	Minimum	41	39	34	35	38	40	42	43	41	46	49	52	49	39	34	37	44	55	55	58	63	48	52	61	59	50	54	56	48	52	63	47.6
Buckhannon	Maximum	60	60	59	60	65	72	69	68	69	76	78	75	60	52	56	69	76	71	75	72	75	75	81	72	72	75	78	82	81	85	84	71.0
	Minimum	41	37	34	33	38	49	48	49	38	41	45	53	42	41	31	33	40	55	55	58	60	44	48	57	60	45	46	52	48	54	58	46.2
Creston	Maximum	70	68	63	64	72	76	72	69	73	80	82	76	58	55	64	79	75	71	79	73	79	81	89	74	71	82	88	84	82	92	91	75.2
	Minimum	42	39	35	34	38	40	44	44	39	43	45	54	50	40	32	34	43	56	54	58	61	46	52	60	61	47	52	54	48	50	64	47.1
Elkins	Maximum	55	56	59	57	66	69	66	63	65	73	76	64	61	47	55	69	72	68	68	69	71	73	80	71	67	71	78	81	79	84	84	68.3
	Minimum	38	34	30	30	35	42	50	44	35	40	43	56	47	37	29	30	46	53	52	56	54	42	44	54	53	42	43	47	48	46	58	43.8
Fairmont§	Maximum	62	66	65	65	72	77	75	72	74	80	82	57	57	56	63	77	80	76	80	70	79	83	89	76	80	82	87	86	84	92	95	75.5
	Minimum	39	36	35	32	38	38	46	42	37	43	47	51	50	41	30	33	39	56	56	57	60	44	46	61	57	47	50	53	48	48	60	45.8
Glenville	Maximum	65	64	69	69	75	77	75	75	74	81	84	81	65	55	65	78	80	74	80	80	80	83	90	88	78	84	88	90	88	91	93	78.0
	Minimum	38	36	31	31	35	36	37	44	38	38	41	53	51	40	29	31	38	55	54	57	67	45	48	58	62	46	50	59	47	50	58	45.3
Grafton	Maximum	64	61	65	62	72	75	72	70	73	80	80	68	57	54	61	74	80	75	..	..	79	80	87	76	74	79	81	85	86	91	93	74.3
	Minimum	35	40	33	33	34	38	46	45	38	40	46	50	50	41	30	30	40	35	..	..	56	44	46	61	56	46	48	46	46	50	59	43.5
Lost Creek	Maximum	60	62	61	66	68	72	72	70	75	78	80	66	55	55	61	73	77	72	78	70	77	79	85	73	73	79	82	87	88	89	89	73.3
	Minimum	38	34	32	30	32	35	44	43	33	38	44	51	50	40	27	30	38	56	54	55	62	40	44	57	58	44	43	50	50	46	60	43.8
Mannington	Maximum	61	62	59	59	65	72	69	70	70	77	78	71	56	55	59	70	74	72	74	72	77	78	81	79	74	78	82	83	79	85	85	71.8
	Minimum	38	34	31	30	34	35	41	39	35	39	42	51	50	40	28	30	38	54	54	55	58	41	43	59	54	43	47	51	44	44	57	43.2
Morgantown	Maximum	68	60	62	63	66	74	70	71	71	80	76	69	56	55	59	71	76	72	76	72	78	79	84	78	75	80	84	84	80	89	90	73.2
	Minimum	34	37	36	35	39	46	46	46	39	53	56	49	48	40	31	35	50	59	54	57	62	47	48	62	60	49	54	52	47	58	65	48.2
New Cumberland	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
New Martinsville	Maximum	65	66	64	65	65	73	73	71	75	81	79	69	58	58	62	75	76	76	71	75	75	74	84	86	77	78	83	81	75	80	87	73.5
	Minimum	39	38	34	34	39	38	42	42	40	44	47	52	50	39	31	35	42	55	56	67	62	44	49	61	59	49	53	54	58	49	62	47.2
Parkersburg	Maximum	61	63	60	62	66	74	72	71	72	79	81	58	58	51	60	72	75	69	76	71	77	79	85	71	73	78	83	80	78	88	88	71.9
	Minimum	43	42	38	40	44	45	48	48	42	55	54	51	46	40	34	42	54	58	56	60	60	51	56	65	62	54	57	60	52	55	65	50.9
Parsons	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Philippi	Maximum	67	59	60	59	66	71	69	67	68	75	77	64	60	54	58	70	76	70	74	69	74	77	84	78	74	78	81	82	78	87	88	71.4
	Minimum	38	39	32	33	38	43	48	49	38	51	49	50	48	38	30	35	47	56	54	59	60	52	47	62	59	44	49	52	46	55	57	47.0
Pickens	Maximum	69	57	58	60	68	70	66	54	65	72	77	68	62	48	55	70	71	65	69	66	72	75	84	79	70	78	78	81	80	85	86	69.6
	Minimum	35	32	28	28	38	41	46	32	40	41	45	49	45	34	26	31	43	49	45	50	45	39	44	54	54	49	43	48	45	50	54	42.0
Terra Alta	Maximum	54	54	58	59	61	69	65	63	62	70	72	60	52	48	52	65	70	68	69	65	70	71	79	63	61	71	79	80	78	83	82	66.2
	Minimum	34	35	29	29	31	36	45	45	37	50	49	46	44	34	29	31	41	50	50	52	55	46	45	52	48	44	47	49	46	50	49	42.8
Wellsburg	Maximum	56	60	61	62	66	74	69	69	71	78	70	58	59	55	60	70	76	73	77	70	76	80	83	79	77	82	85	80	83	90	90	72.2
	Minimum	35	32	29	29	30	32	37	39	33	42	45	48	48	38	27	29	37	53	55	56	59	41	49	60	53	46	48	48	42	43	58	42.6
Weston	Maximum	61	62	62	62	68	73	70	70	77	81	77	58	54	59	71	76	70	74	73	76	78	83	78	73	78	82	85	82	87	86	86	72.8
	Minimum	41	37	35	35	40	39	48	48	38	48	46	51	51	41	31	34	41	59	55	58	61	45	49	59	59	46	50	54	51	51	64	47.3
Wheeling§	Maximum	66	67	67	70	71	76	74	74	77	83	73	59	58	54	62	75	80	77	80	68	82	85	89	76	79	87	91	86	86	92	92	76.0
	Minimum	38	38	34	33	39	40	41	42	38	46	50	51	41	39	32	37	43	55	57	58	62	45	55	60	56	44	53	52	47	49	62	46.4
Southern Division.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Bluefield	Maximum	59	59	61	65	65	65	64	60	61	72	75	75	74	53	60	61	61	56	63	63	71	77	77	80	62	67	75	77	79	..	..	66.8
	Minimum	41	38	45	37	47	45	50	42	39	40	52	53	53	40	30	37	40	54	52	54	59	58	49	54	54	50	50	50	55	..	..	47.2
Charleston	Maximum	62	60	68	69	68	78	68	69	76	78	79	78	70	56	59	64	70	68	71	74	79	82	86	87	85	87	89	88	87	88	89	75.2
	Minimum	38	37	38	38	41	45	49	50	46	42	50	58	52	42	35	39	52	58	54	58	59	57	55	60	57	56	59	59	60	62	60	50.5
Gary§	Maximum	64	58	69	69	68	68	62	66	70	75	77	79	65	50	62	70	67	67	71	70	70	77	82	79	66	73	78	80	78	80	80	70.6
	Minimum	42	36	40	34	41	45	53	50	39	39	46	52	59	42	31	34	42	55	53	50	53	54	46	54	60	49	52	51	55	55	54	47.3
Green Sulphur Spgs.	Maximum	66	61	67	68	70	70	66	68	70	78	80	78	73	54	64	68	70	70	75	74	78	80	84	69	66	78	83	81	84	84	81	72.8
	Minimum	44	34	31	30	40	40	49	47	36	38	44	45	50	41	27	32	36	53	54	54	55	45	45	52	55	47	48	47	50	51	51	44.2
Hinton §	Maximum	66	63	71	70	74	72	62	70	72	81	83	75	72	55	66	72	70	70	75	72	81	82	86	66	64	77	82	84	82	84	84	73.6
	Minimum	44	36	35	35	36	36	50	49	40	39	40	46	57	45	31	34	36	44	53	52	56	50	48	50	55	50	49	53	54	53	55	45.5
Holcomb	Maximum	60	60	63	63	71	71	66	65	67	74	78	75	64	54	59	70	71	65	73	73	75	78	84	74	68	75	81	81	82	86	83	71.2
	Minimum	39	31	28	27	48	45	48	44	32	34	35	55	43	39	27	29	43	51	50	52	57	41	45	54	49	41	44	46	49	49	52	42.8
Huntington §	Maximum	69	63	69	71	74	76	56	73	75	81	84	70	70	60	68	79	72	64	73	76	82	81	89	80	78	83	86	87	84	86	89	75.7
	Minimum	42	47	40	42	47	45	49	50	42	46	52	62	52	39	36	40	50	57	56	58	62	51	55	65	64	56	56	57	56	53	62	51.6
Lewisburg	Maximum	62	60	66	64	68	69	67	64	66	74	76	75	67	51	61	67	68	67	71	71	75	78	79	70	63	70	79	82	83	81	80	70.1
	Minimum	41	34	31	32	48	38	48	46	36	36	42	56	51	42	27	33	38	51	52	51	56	45	46	51	54	43	46	47	54	53	50	44.5
Marlinton	Maximum	56	54	60	60	64	66	62	58	60	68	74	70	60	48	54	62	64	64	66	64	72	72	78	64	60	68	78	80	78	82	78	65.9
	Minimum	38	28	24	26	30	28	40	42	30	32	38	52	48	38	24	26	30	46	50	48	54	40	40	46	50	38	46	42	44	52	50	39.4
Point Pleasant	Maximum	67	65	65	68	72	78	73	75	77	83	85	74	58	57	65	75	75	70	77	73	81	83	89	83	75	80	86	87	82	91	92	76.2
	Minimum	39	45	36	36	39	39	43	44	39	44	50	53	49	38	33	36	50	55	55	59	60	47	53	62	64	53	53	54	49	50	64	48.1
Powellton	Maximum	71	64	68	70	77	76	69	69	73	79	83	80	66	54	65	78	77	71	79	74	80	83	89	71	70	79	84	85	84	88	91	75.7
	Minimum	46	39	36	35	41	40	53	48	41	41	48	60	51	43	32	35	46	56	53	57	60	48	49	58	61	49	53	53	55	51	59	48.3
Robertsburg§	Maximum	66	65	65	67	77	77	65	..	73	79	83	66	55	56	64	82	72	66	77	72	78	80	89	76	77	86	87	85	81	88	92	74.9
	Minimum	39	43	38	38	44	39	39	45	..	38	48	56	50	40	33	36	49	55	55	58	60	52	51	62	62	51	52	54	53	50	58	48.3
Ryan	Maximum	67	65	65	66	71	75	65	73	76	78	82	68	60	55	62	75	75	68	75	70	78	80	85	68	70	78	83	85	80	87	88	74.3
	Minimum	42	38	32	31	38	40	40	41	36	37	42	57	50	40	27	30	42	43	51	55	60	42	52	54	61	50	50	51	49	49	49	44.5
Spencer §	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Sutton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Union	Maximum	66	68	69	70	72	71	69	66	72	75	78	79	73	60	65	67	69	69	73	77	76	80	78	81	65	68	80	85	85	82	82	73.2
	Minimum	41	43	45	31	33	38	50	47	34	35	40	45	57	43	27	33	35	53	55	52	57	45	44	45	53	40	42	45	47	49	52	43.7
White Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Williamson §	Maximum	63	57	65	67	73	78	61	68	70	78	80	80	69	55	63	76	70	65	75	71	76	78	81	79	76	75	80	81	79	82	84	72.7
	Minimum	47	42	41	38	40	48	50	52	45	45	47	53	62	43	37	38	45	54	56	57	60	52	53	55	62	54	55	56	57	54	61	50.3

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, May, 1920.



nne

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY

DEC 1 1920

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JUNE, 1920

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
NOVEMBER 12, 1920

Departure of the Mean Temperature from the Normal, June, 1920.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVIII. PARKERSBURG, W. VA., JUNE, 1920. NO. 6.

GENERAL SUMMARY.

June was somewhat cooler and considerably wetter than usual and the month was characterized by frequent and quite favorably distributed rains. The June rainfall was heavier in only eleven years of record. The sunshine, however, was practically normal. The month was free from severe hailstorms. Owing to wet soil, planting and cultivation were much delayed. Crops were slightly damaged on low bottoms on the 19–20th by flooding. At the close of the month corn was about ten days late but making good growth. Wheat was generally short and thin and generally ready for harvest. Oats were also short and in full head. Pastures and meadows were good. Potatoes were in excellent condition.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.03 and 30.02 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.38 inches on the 27th, and 29.53 inches on the 17th; Elkins, 30.39 inches on the 27th, and 29.49 inches on the 17th.

TEMPERATURE.

The monthly mean for the State, 49 stations reporting, was 67.9°. The departure from the normal for 42 stations having ten or more years of record was —0.9°. The month opened considerably warmer than usual and the temperatures were also somewhat above the average from the 10th to the 17th and on the last three days, with the highest readings occurring generally on the 10th, 11th, 16th, and 19th. Abnormally cool weather prevailed from the 5th to the 8th and the 17th to the 27th, with the lowest temperatures, ranging from 36° to 51°, occurring on the 6th and 7th, when light frosts occurred in a few of the more elevated sections.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 77 per cent; 8 p. m., 68 per cent. The June averages for the same hours for the past 30 years are 78 and 68 per cent, respectively. Elkins, 8 a. m., 85 per cent; 8 p. m. 72 per cent. The June averages for Elkins for the same hours for the past 20 years are 84 and 74 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 68 stations reporting, was 5.01 inches. The departure from the normal for 46 stations having ten or more years of record was 0.52 inch. The rainfall was heaviest over the northern counties and lightest over the eastern panhandle section. Rain was general from the 2d to the 5th, the 12th to the 17th, and the 20th to the 24th, the amounts received on the 4th, 16th, and 21st–22d being heavy in many localities. At Wellsburg, Brooke County, the fall on the 16–17th was 6.03 inches. Thirteen stations recorded 24-hour falls of 2 inches or more during the periods named. There were also light showers on the 8th, 10th, 11th, and 30th.

HAIL.

Light hail fell in sections of the counties named herewith as follows: Brooke, 8th; Wood, 10th; Webster, 15th; Ohio, 16th; Nicholas, 17th; Pleasants, 22d.

WIND.

The average wind velocity at Parkersburg was 4.6 miles per hour, or normal as compared with the June average for the past 30 years. The average at Elkins was 4.4 miles per hour, or 1.1 miles above the June average for 21 years. The highest velocity at Parkersburg was 32 miles per hour from the northwest on the 17th, and at Elkins 25 miles per hour from the southwest on the 17th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 60 per cent of the possible amount, or 2 per cent above the June average for 22 years. The average at Elkins was 46 per cent, or 6 per cent below the June average for 21 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Creston, 7th, 11th, 25th, and 26th; Elkins, 7th, 8th, 9th, 14th, 19th, 24th, 25th, and 26th; Hinton, 7th, 16th, 26th, and 29th; Huntington, 7th and 9th; Mannington, 7th, 8th, 9th, 14th, 18th, 19th, 25th, and 26th; Moundsville, 3d; Robertsburg, 25th; Romney, 3d, 4th, 5th, 9th, 10th, 24th, and 25th; Rowlesburg, 7th, 9th, 14th, 19th, 24th, and 25th; St. Marys, 7th, 8th, 14th, 24th, 25th, and 26th; Terra Alta, 5th; Weston, 7th, 8th, and 24th.

Frost, light: Holcomb, 7th and 8th; Weston, 19th and 26th.

Halos, solar: Elkins, 1st; Wheeling 28th and 29th.

Thunderstorms (dates and number of stations reporting): 1st, 1; 2d, 6; 3d, 3; 4th, 1; 8th, 4; 9th, 1; 10th, 4; 12th, 4; 13th, 13; 14th, 5; 15th, 14; 16th, 11; 17th, 10; 20th, 2; 21st, 6; 22d, 9; 23d, 3; 24th, 10; 25th, 2; 29th, 1; 30th, 4.

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	71.2	.....	.....	5.02	.....	.....	.....	.....	.....	.....
1892	74.1	99	41	3.90	.....	.....	.....	.....	.....	.....
1893	70.2	99	40	3.81	6.41	1.83	.....	13	10	7
1894	70.4	103	32	3.27	6.78	1.25	.....	16	10	4
1895	72.1	102	38	2.92	5.66	1.20	.....	15	10	5
1896	69.8	95	30	5.35	9.86	0.11	.....	8	14	8
1897	69.3	96	35	4.31	6.77	1.31	.....	12	12	6
1898	70.9	99	41	3.21	7.50	0.66	.....	14	11	5
1899	72.0	98	35	4.99	8.93	1.46	.....	14	9	7
1900	71.2	98	41	5.30	15.62	2.49	.....	9	12	9
1901	70.7	104	32	5.67	11.10	1.37	.....	12	12	6
1902	68.0	100	33	5.19	8.49	2.45	.....	11	13	6
1903	65.1	93	34	4.80	12.30	2.01	.....	8	11	11
1904	69.5	97	36	4.20	8.29	2.05	.....	10	13	7
1905	70.6	100	34	4.38	7.72	1.74	.....	13	11	6
1906	70.9	101	38	5.25	9.32	2.84	.....	11	12	7
1907	65.3	97	33	6.00	11.95	1.93	.....	10	11	9
1908	69.2	98	36	3.12	6.75	1.35	.....	15	10	5
1909	71.1	101	35	5.73	9.19	2.47	.....	9	13	8
1910	66.6	96	32	5.67	11.27	1.52	.....	10	10	10
1911	70.7	101	40	4.44	9.34	1.88	.....	14	10	6
1912	67.3	95	29	4.27	9.21	1.11	.....	13	10	7
1913	69.5	99	29	3.44	6.55	0.86	.....	18	8	4
1914	72.0	100	30	3.00	6.60	0.62	.....	15	11	4
1915	67.7	95	33	3.63	7.09	1.21	.....	15	8	7
1916	65.8	94	35	5.42	14.54	2.50	.....	14	8	8
1917	67.7	99	31	3.81	6.58	1.38	.....	14	9	7
1918	68.2	99	34	4.17	10.11	0.87	.....	16	7	7
1919	73.0	100	40	5.06	10.15	1.67	.....	16	8	6
1920	67.9	98	36	5.01	9.70	2.53	.....	13	7	10
Means and extremes ..	69.6	104	29	4.48	15.62	0.11	.....	13	10	7

Climatological data for June, 1920.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall (unmelted).	With precip. 0.01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	19	63.0	−0.4	86	12	37	6	40	4.65	−0.19	1.07	0	14	12	7	11	w.	G. C. Dixon.
Brandywine	Pendleton		4	66.0		90	10†	38	7	42	4.10		1.00	0	9	17	9	4	s.	Elmer Keister.
Burlington	Mineral	875	26	66.5	−1.8	90	11†	41	7	38	5.55	+1.31	1.37	0	8	8	18	4	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	31								3.80	−0.02	1.20	0	8				w.	S. W. Lightner.
Martinsburg	Berkeley	435	28	70.4	−0.2	95	29	51	5	37	4.52	+0.16	1.40	0	9	15	9	6	e.	G. W. VanMetre, C. E.
Moorefield	Hardy	900	24	69.6	+0.1	96	29	44	7	41	5.15	+1.02	1.10	0	11	26	2	2		M. S. Henkel.
Piedmont	Mineral	919	7	66.9		90	11†	42	7	37	6.07		1.52	0	11	9	14	7	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	22	69.2	−0.8	94	14	42	8†	46	5.08	+1.00		0	11	9	12	9		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	21			87[a]	29				4.40	+0.22	1.00	0	8	21	2	7	w.	J. M. Mallow.
Wardensville	Hardy	1,200	2	61.8[f]		88[f]	16	43[f]	20	26[f]	3.75		1.56	0	9	9[h]	1[h]	12[h]	w.	Luther F. Sutton.
Averages and extremes				66.7	−0.6	96	29	37	6	46	4.71	+0.50	1.56	0	10	14	9	7	w.	
Northern Division.																				
Bens Run	Pleasants	622	18	70.0	−0.3	92	13	48	7	32	6.22	+1.78	2.25	0	12	19	6	5		J. D. Riggs.
Bruceton Mills	Preston	1,549																		Floyd Cale.
Buckhannon	Upshur	1,411	23	66.9	−1.4	86	11†	43	7	30	6.46	+1.52	1.45	0	11	17	8	5		H. A. Darnall.
Cortland	Tucker	3,300	4																	G. F. Harmon.
Creston	Wirt	701	18	70.2	−0.4	91	10†	43	7	38	4.75	+0.50	1.00	0	13	15	5	10	sw.	J. M. Reed.
Davis	Tucker	3,093	11								4.58		1.21	0	10					Ross C. Male.
Elizabeth	Wirt	646	8								5.36		2.45	0	9					E. D. Ball.
Elkins	Randolph	1,947	19	64.2	−2.4	84	16	41	7	36	3.83	−1.21	1.28	0	13	3	12	15	w.	U. S. Weather Bureau.
Fairmont	Marion	883	14	69.6	−0.7	93	10	43	7	40	4.12	−0.38	1.40	0	15	19	3	8	w.	F. P. Hall.
Glenville	Gilmer	738	26	70.8	0.0	93	10†	46	7	40	5.84	+1.42	2.25	0	10	22	6	2	w.	Howard R. Brannon.
Grafton	Taylor	1,000	27	68.9	−0.4	92	10†	43	7	40	2.95	−1.63		0	1	13	11	6	e.	W. C. Byers.
Lost Creek	Harrison	1,026	22	68.0	+0.2	89	10†	40	8	39	4.34	+0.21	1.66	0	11	16	4	10	w.	Allen Smith.
Mannington	Marion	974	17	66.6	−1.5	88	13	41	7	34	4.78	+0.59	1.22	0	18	11	8	11	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	27	68.6	−0.6	90	11	45	7	31	3.27	−1.51	0.85	0	8	6	9	15		Prof. E. L. Andrews.
Moundsville	Marshall	642	17	69.0	−0.8	93	11	45	7	46	3.58	+0.11	0.70	0	14	5	18	7	w.	G. W. Wright.
New Cumberland	Hancock	987	22																	M. F. Smith.
New Martinsville	Wetzel	634	26	68.6	−2.9	92	12	46	7	31	6.10	+2.10	2.20	0	13	16	6	8	s.	Wm. Ankrom.
Parkersburg	Wood	638	33	70.2	−1.3	92	16	48	7	29	5.20	+0.55	1.92	0	13	10	7	13	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	20	65.6	−0.5	91	12	41	7†	41	6.30	+1.11		0		10	10	10		J. W. Swisher.
Philippi	Barbour	1,149	23	67.1	−1.3	89	11	42	7	33	5.19	+0.65	1.07	0	14	10	8	12	w.	Prof. Vernon E. Wood.
Pickens	Randolph	2,697	17	63.6[a]	−1.6	87[a]	16	39[a]	7	39[a]	4.89	−1.26	1.09	0	13	14	6	10	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	33								6.48	+1.51	2.13	0	13				w.	J. F. Pierce.
Saint Marys	Pleasants	577	11								5.65	+2.05	1.43	0	10				sw.	Wm. Hughes.
Smithfield	Wetzel	835	14	66.8	−1.2	90	11†	41	8	36	5.83	+1.32	1.72	0	16	16	11	3	sw.	G. M. Whistler.
Stony River Dam	Tucker		0	66.2[a]		84[a]	10†	44	5†	26[a]	5.70		1.92	0	11	6	9	15	w.	A. C. Becker.
Terra Alta	Preston	2,612	19	62.2	−1.1	87	10	41	7	36	5.89	−1.15	1.25	0	16	12[a]	4[a]	13[a]	w.	W. J. Grimm.
Wellsburg	Brooke	1,225	19	68.2	−0.7	92	10	41	7	40	9.70	+5.42	6.03	0	15	16	6	8	w.	George P. Pfister.
Weston	Lewis	1,026	24	68.1	−1.7	88	11†	44	7	33	5.24	+0.72	1.90	0	15	5	18	7	ne.	Weston State Hospital.
Wheeling	Ohio	645	33	70.9	0.0	96	10†	46	7	39	4.47	+0.67	1.50	0	13	11	9	10	w.	Miss M. B. Forsyth.
Averages and extremes				67.7	−1.0	96	10†	39	7	46	5.26	+0.66	6.03	0	13	12	9	9	w.	
Southern Division.																				
Alum Creek	Kanawha										4.16		1.42	0	11					J. H. Allen.
Bancroft	Putnam	574	16	69.0	−2.0	90	16	47	7	32	4.35	−0.29	1.28	0	14	17	1	12	se.	R. E. Dent.
Beckley	Raleigh	2,440	20	67.8	+0.6	88	11	40	6	31	3.38	−0.87	0.85	0	8	13	7	10	w.	John A. Ewart.
Bluefield	Mercer	2,558	25	67.0	−1.9	86	17	42	8	33	4.25	−0.16	1.25	0	10	12	9	9		Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	5								6.50		1.60	0	9	17	2	11	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	17	76.0	+3.0	98	29	50	7	35	7.23	+2.70	1.50	0	11	16	1	13	sw.	C. V. Lewis.
Clay	Clay	706	4								4.73		2.44	0	11					Prof. E. H. Knabenshue.
Cuba	Jackson	650	18	68.4	−0.8	90	16	43	6	38	5.01	+1.84	1.95	0	12	9	17	4	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	4								3.84		1.26	0	11					Lockmaster.
Dam 20 O. R.	do	551	4								5.34		1.25	0	11					Lockmaster.
Dam 22 O. R.	Jackson	538	5								3.67		1.27	0	10					Lockmaster.
Dam 26 O. R.	Mason	505	4								3.66		1.10	0	10					U. S. Engineer Office.
Evans	Jackson	606	8	70.2		88	14	48	6†	38	4.62		1.70	0	12	12	5	13		B. F. Sayre.
Gary	McDowell	1,426	4	67.2		89	16	43	6	35	4.21		1.60	0	12	8[a]	1[a]	20[a]		U. S. Coal & Coke Co.
Gassaway	Braxton																			H. A. Hays.
Green Sulphur Springs	Summers	1,600	24	66.9	−1.7	89	11†	42	8	37	5.81	+1.87	1.16	0	13	14	1	15	w.	W. H. Gwinn.
Hinton	do	1,450	23	67.2[a]	−3.4	88[a]	11†	47	7†	35[a]	4.98	+0.77	1.18	0	11	10	0	20	n.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	8	64.0		87	16	36	7	41	6.28		1.15	0	18	10	5	15		W. C. Williams.
Huntington	Cabell	538	26	72.2	−0.5	94	16	47	6	33	2.92	−1.40	0.90	0	12	18	0	12	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	1								5.74		3.20	0	9					J. O. Brown.
Kayford	Kanawha	1,335	4								7.62		3.55	0	14					Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	20																	Geo. T. Argabate.
Logan	Logan	687	17																	W. C. Flanagan.
Madison	Boone	704	14																	S. E. Bradley.
Marlinton	Pocahontas	2,131	21	60.4	−4.6	82	11†	36	7	34	5.53	+0.60	2.28	0	14	0	22	8	sw.	S. L. Brown.
Miller	Fayette		0								5.44		0.94	0	13					J. R. Bays.
Point Pleasant	Mason	553	27	71.3	−1.2	94	13†	44	6	33	4.50	+0.11	1.85	0	14	13	2	15		W. D. Holmes.
Powellton[b]	Fayette	933	24	69.0	−1.7	91	10†	37	7	46	5.62	+0.03	2.01	0	14	13	8	7		Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	4								4.94		1.17	0	15					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	4								5.19		2.00	0	6					Wm. E. Hill.
Robertsburg	Putnam	574	20	69.9	−1.5	91	28	44	6	35	3.54	−0.44	1.07	0	9	16	2	12		E. C. Brace, Jr.
Ryan	Roane	709	17	68.0	−1.2	90	11†	41	6	35	4.67	+0.21	0.88	0	16	11	10	9		Wm. E. Ryan.
Sharples	Kanawha		0								5.24		2.00	0	8					F. E. Rippetoe.
Spencer	Roane	784	16	70.4	+0.5	92	15†	45	6†	38	2.53	−1.90	0.84	0	4	14	14	2		A. M. McKown.
Sutton	Braxton	839	14											0		14[f]	2[f]	8[f]		Lawrence Freeman.
Union	Monroe	2,250	16	66.8	−0.2	88	11†	40	7	39	6.10	+1.89	2.00	0	10					Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	10																	J. M. Ayres.
Williamson	Mingo	660	20	70.4	−2.1	88	11†	50	7	28	5.17	+0.57	1.42	0	11	22	3	5	w.	J. F. Keyser.
Averages and extremes				68.5	−1.0	98	29	36	7	46	4.90	+0.35	3.55	0	11	13	6	11	w.	
State averages and extrms.				67.9	−0.9	98	29	36	7	46	5.01	+0.52	6.03	0	12	13	7	10	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table, indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates.

Daily precipitation for June, 1920.

Stations.	Watersheds.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Panhandle Division.																																	
Bayard	Potomac			.02	.22	.69	.31							.29	.18	.68	.39	.49		T.	.70	.34	.18	.14	.02					T.			4.65
Brandywine	do			.35	.90	1.00							.25			.15	.10	T.		T.		.55			.75					.05			4.10
Burlington	do			T.	.90	1.00			T.					.25		.92	*	1.37		T.	.63		T.	T.	.48					T.			5.55
Harpers Ferry ‖	do					1.20								.10			.44	.60	.60			.41	T.	.35		.10							3.80
Martinsburg	do				*	1.40			.07				.53	.42		.90	.68	.17			.35			T.	T.								4.52
Moorefield	do			1.10	.65	1.10								.90	.50	.22	.02	.08			.50				.06					.02			5.15
Piedmont	do				.95	.74								.24		1.15	.52	1.52			.66	.23	.01	.04	.01								6.07
Romney	do			*	*	1.72			.05					.96			1.35	.28			*	*	.66	.06	T.					T.			5.08
Upper Tract	do			.40	1.00	1.00									40	.60					.20	.40				.40				T.			4.40
Wardensville ‖	do				.35	1.56								.25	T.	.40	.60	.20			.30		.05	T.		.04							3.75
Northern Division.																																	
Bens Run	Ohio				2.25	.55			.06		.09				.35		.35	.05			.29	.11	1.01	.90							.21		6.22
Bruceton Mills ‖	Monongahela																																
Buckhannon	do				1.45	1.05	.05		T.				.35	.35		.50	T.	.60		T.	.52	.24		1.25							.10		6.46
Cortland ‖	Monongahela																																
Creston ‖	Little Kanawha			.60	1.00	1.00	T.			.04					.12		.14	.05	.04		.10	.24	.47	.35		.60							4.75
Davis ‖	Monongahela					1.21	.21							.22			.95	.45		T.	.38	.45	.20	.44	.07								4.58
Elizabeth ‖	Little Kanawha			.22	.68	2.45						.22						.17				.44	.44	.55	.19								5.36
Elkins ***	Monongahela		T.	.07	.89	.50			T.			T.	T.	.30		.12	.24	.60		T.	.46	.11	.31	.07	.06						.10		3.83
Fairmont ‖	do	.07			.12	1.40	.03			.03				T.	.30		.17	.46	.14		.11	.53	.02	.51	.08	.15					T.		4.12
Glenville	Little Kanawha				.95	2.25	T.		T.					.16	.54		.16		.34			.66	.30	.18		.30					T.		5.84
Grafton	Monongahela				*	*	1.31		T.					.07		.16	.45	*			*	.28	.50		.18						T.		2.95
Lost Creek	do		.45	.15	1.66	.40	T.		T.						.22	.15	.10	T.			.74	.18	.05	.24	T.						T.		4.34
Mannington	do	.01		.22	1.22	.56	.02		.03				T.	.27	.17	.07	.05	.53			.41	.03	.11	.76	.13	.02						.17		4.78
Morgantown	do					.35								.85		.34	.33				.48			.45	.42						.05		3.27
Moundsville	Ohio		*	.20	.70	.40			.20				.05	.20		T.	.10	.30			.18	T.	.25	.65	.15						.20		3.58
New Cumberland	do																																
New Martinsville	do			.10	2.20	.90			.10				.15		.55		.25	.30			.25	.05	.15	.75							.35		6.10
Paskersburg ***	do		.23	T.	1.92	T.			.10		.60		T.	T.	T.	.01	.02	.07		T.	.19	.14	.36	.38	.32						.86		5.20
Parsons	Monongahela					*	*	2.40					T.	T.	1.00	*	.20				*	.20	*	.50	*	2.00								6.30
Philippi	do			.18	1.07	.96	.03		T.				.17	T.	.10	T.	.72	.21		T.	.60	.15	.23	.71	.04						.02		5.19
Pickens	do			.34	.75	.63							.20	.78				.49		.10	.38	.45	*	*	.35						.42		4.89
Rowlesburg ‖	do			.12	T.	1.98	.15							.14	.18		1.20	.15	.61			.61	.05	1.02	.05	.22								6.48
Saint Marys ‖	Ohio	T.		.58	.68	1.28						.33			T.		.80				.05	.30	.08	1.43							.12		5.65
Smithfield ‖	Fishing Creek			.25	.39	1.72	.04							.04	.18		.93	.24	.17		.03	.50	.05	1.16	.06	.02					.05		5.83
Stony River Dam ‖	Monongahela					1.92	.09							.28	.11		1.56	.51	.22		.12	.53	.10	.26									5.70
Terre Alta	do			.20	.67	1.05			.01					.44	.01	.70	.51	1.25	.02			.13	.17	.44	.12	.01					.16		5.89
Wellsburg	Ohio	.03		.44	.19	.50			.90				.08	.42			3.78	2.25			.23	.05	.32	.20	.22						.09		9.70
Weston	Monongahela			.08	1.82	.72	.02		.02				T.		.85	.10	.08	.23	T.		.67	.21	.15	.09	.14						.06		5.24
Wheeling ‖	Ohio			.42	.05	.96	T.		.04	.24				.04	.50	.18	T.	1.50	.05			.25	.01	.23	T.						T.		4.47
Southern Division.																																	
Alum Creek ‖	Great Kanawha		.45	1.42	.63	.32							.31	T.					.12	.23	.40	.21	.03	.04	T.								4.16
Bancroft ‖	do			.61	.40	.88					.13			.37	.10	.10	T.	.10	.10		.09	.40	.37	.32		.38							4.35
Beckley	do	.44	.85													.24		.32		.40	.84	.11	.18							T.		3.38
Bluefield	do		.20	20	.50	1.25								.15			.20		.10	.15	.45	1.05	T.	T.									4.25
Camden-on-Gauley ‖	do		.10		1.60								.80	1.00			.80		.20			1.00		.80							.20		6.50
Charleston ‖	do			1.10	.50	1.50	.40					T.			.45	.30			.25			.48	.90	1.00	.35								7.23
Clay ‖	do		.03	.78	.10	2.44	.07						.22						.04	.09			.70	.10	.16								4.73
Cuba	Sand Creek		.10	.15	1.95	.30			T.		.40				.55	T.		T.			.26	.60	.20	.30	.15						.05		5.01
Dam 19 O. R. ‖	Ohio			.26	.52	1.26										T.	.27	.03	.04		T.	.24	.17	.62	T.	.35						.08		3.84
Dam 20 O. R. ‖	do			.28	1.00	1.25									60		.08		.05			.25	.60	.90		.03							5.34
Dam 22 O. R. ‖	do			.18	.43	1.27						.05			.33		.20					.28	.08	.60		.25							3.67
Dam 26 O. R. ‖	do			.64	.21	1.10					.02			.55							.05	.38	.13	.08		.50							3.66
Evans	Ohio			.30	1.70	.32			.05	T.	T.				.28	.27		T.		T.	.34	.31	.23	.21	.35						.26		4.62
Gary ‖	Big Sandy		.14	.01	.18	1.60	.01										.10		.04		.42	1.16	.14	.40		.01							4.21
Gassaway ‖	Great Kanawha																																
Green Sulphur Spgs	do		1.16	.11	.75	1.08								.13			.54		.14		.31	.83	.36	.12	.18	.10								5.81
Hinton ‖	do			1.14	.22	1.04	.06							.36			.08		.14		.42	1.18	.04	.30									4.98
Holcomb	do		.16	.62	.65	.75	.04						.04	.17	.31	1.15		.50	.04	.06	.48	.37	.25	.23	.04						.42		6.28
Huntington ‖	Ohio			.54	.16	.70	.02				.10			.20	.04	.02		T.			T.	.46	.44	.16		.08							2.92
Kanawha Falls ‖	Great Kanawha			.08	.12	3.20									.32		.20	.25				.95	.45	.17									5.74
Kayford ‖	do			.43	.08	3.55	.10				.24			.52		.26	.36		.37		*	1.12	.22	.25		.12							7.62
Lewisburg	do																																
Logan	Guyandotte																																
Miller ‖			.15	.40	.33	.94								.40	.16		.48		.65		.58	.58	.17	.42	.18								5.44
Marlinton	Great Kanawha			.10	1.20	1.08	.08						T.		.22	.30		.46	.20	.22	.82	.26	.24	.10						T.	.25		5.53
Point Pleasant	Ohio	.20	.65	.15	1.85	.22							.12			.10		.02			.20	.46	.04	.35	.04							.10		4.50
Powellton	Grrat Kanawha		.10			2.01							.02		.39	.34	.01	.71	.09	.38	.60	.20	*	*	.77								5.62
Raleigh ‖	do		.28	.57	.43	1.17	.03						.09	.12	.11		.36	.04	.27		.36	.83	.23	.05									4.94
Renick ‖	do			.32			2.00										.45		.40			2.00				.02							5.19
Robertsburg ‖	do		.17	.12	1.07						.15			.65			.25					.20	.75	.18									3.54
Ryan	do	.03	.27	.82	.17						.01			.11	.34	.08		.11		.01	.71	.70	.05	.14	.24						.88		4.67
Sharples ‖	Coal River				.25	2.00											.35		.15	.40	.95	1.06	.08										5.24
Spencer ‖	Little Kanawha														.68		T.		.83					.84		.18								2.53
Sutton	Great Kanawha																																
Union	do		.10			2.00							.40			1.00		.40		.50	.35	.90	.10	.35									6.10
White Sulphur Spgs	do																																
Williamson ‖	Big Sandy				.68	1.42	.02				.18			.10			.32	.02			.75	1.22	.36							.10			5.17

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of of observation.

*** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

* Precipitation included in next following measurement.

T. Trace, or less than 0.01 inch.

Daily temperatures for June, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	85	83	83	73	50	50	78	80	80	83	85	86	82	80	80	70	71	68	68	69	78	72	75	77	79	81	80	80	83	76	....	76.4
	Minimum	50	52	54	48	39	37	38	44	58	61	64	65	63	53	50	48	44	39	38	51	50	51	50	42	41	43	44	54	59	61	....	49.7
Brandywine	Maximum	85	85	81	70	69	68	80	77	78	90	90	90	90	89	86	90	84	75	70	60	75	74	76	80	75	80	82	89	90	85	....	80.4
	Minimum	44	50	58	52	50	49	38	43	44	49	58	58	59	57	59	62	56	56	45	55	55	50	50	45	50	43	45	50	55	59	....	51.5
Burlington	Maximum	85	84	78	64	59	68	77	76	76	85	90	86	90	86	78	88	84	73	70	65	74	70	74	76	76	76	78	83	85	89	80	....	78.2
	Minimum	47	53	59	51	51	53	41	46	50	50	63	64	64	56	63	64	63	56	46	57	55	54	56	59	50	47	48	53	59	65	....	54.8
Martinsburg §	Maximum	89	90	83	63	62	70	80	75	79	88	94	92	93	87	82	91	89	76	75	69	79	78	80	83	81	86	89	88	95	84	....	82.3
	Minimum	53	57	61	61	51	52	52	52	53	55	57	68	65	62	66	66	64	60	54	59	55	58	61	56	57	52	56	58	62	68	....	58.4
Moorefield	Maximum	89	90	86	68	64	70	79	80	80	90	95	92	94	89	87	93	89	78	74	66	79	79	82	80	85	83	88	90	96	86	....	83.4
	Minimum	50	55	60	53	52	51	44	49	57	49	64	63	64	60	64	65	63	59	48	58	56	56	51	55	52	49	49	55	59	64	....	55.8
Piedmont	Maximum	86	86	80	66	61	69	78	78	74	89	90	87	90	86	83	87	83	72	72	68	73	72	75	76	77	80	83	89	89	78	....	79.2
	Minimum	49	50	52	50	50	52	42	46	52	54	65	61	65	59	63	65	58	56	47	56	53	55	57	53	50	48	49	55	60	65	....	54.6
Romney	Maximum	85	88	90	71	62	71	80	81	85	91	93	93	91	94	81	90	90	89	92	71	76	78	78	80	82	87	90	91	93	86	....	84.3
	Minimum	48	50	55	52	50	54	43	42	50	50	56	65	60	59	63	55	58	55	46	57	54	58	57	55	51	42	50	53	59	72	....	54.0
Upper Tract	Maximum	85	86	82	82	77	77	76	78	..	85	86	86	86	85	85	85	85	85	82	80	80	76	76	78	78	78	78	86	87	84	....	81.9
	Minimum																																
Wardensville	Maximum	66	68	72	75	61	60	....	64	64	65	78	....	....	78	73	88	76	62	61	56	....	60	76	78	68	....	....	66	76	80	....	69.6
	Minimum	53	57	60	58	55	50	....	50	52	53	58	....	....	62	60	66	52	50	45	43	....	50	54	56	50	....	....	47	50	62	....	53.9
Northern Division.																																	
Bens Run	Maximum	88	86	84	70	61	73	79	76	86	91	90	83	92	88	90	89	81	75	75	67	74	72	74	78	80	85	87	90	90	80	....	81.1
	Minimum	59	65	60	55	54	49	48	52	54	59	66	66	67	60	68	68	62	55	52	61	59	56	56	56	53	54	55	62	64	68	....	58.8
Buckhannon	Maximum	82	82	78	65	60	65	72	72	78	85	86	84	85	81	81	85	81	71	73	70	71	73	78	75	79	79	83	85	86	77	....	77.4
	Minimum	54	60	62	55	55	56	43	46	51	60	64	63	64	60	65	65	65	55	48	59	55	55	51	50	49	50	53	57	62	59	....	56.4
Creston	Maximum	88	88	78	75	60	75	81	80	87	91	91	85	90	91	90	91	85	75	73	67	73	75	87	79	79	86	90	91	91	85	....	82.6
	Minimum	55	69	62	56	56	48	43	48	52	56	62	63	62	65	67	65	63	56	58	58	60	62	55	53	52	51	54	60	63	63	....	57.9
Elkins ***	Maximum	81	82	73	62	60	63	72	71	77	84	84	80	84	82	79	84	78	68	69	65	69	67	67	75	71	77	82	83	84	76	....	75.0
	Minimum	48	55	59	53	52	45	41	43	47	48	62	64	61	58	61	64	55	50	46	57	55	54	53	49	52	47	47	53	59	67	....	53.5
Fairmont §	Maximum	90	88	78	60	60	74	82	80	87	93	91	89	92	90	89	91	82	76	75	70	74	72	75	78	80	87	91	91	92	79	....	81.9
	Minimum	56	62	64	54	53	51	43	48	52	54	66	63	64	61	66	67	64	51	50	56	59	57	56	54	52	52	52	51	60	63	66	....	57.2
Glenville §	Maximum	89	88	88	74	63	74	83	85	88	93	92	92	92	92	93	91	92	77	77	73	76	75	77	82	82	88	90	92	93	92	....	84.8
	Minimum	53	62	61	56	57	52	46	49	53	53	64	62	62	62	62	63	61	54	50	58	59	53	54	53	55	52	53	59	63	64	....	56.8
Grafton	Maximum	89	89	78	66	60	71	79	76	85	92	91	90	91	88	87	90	83	74	75	69	75	72	74	75	77	85	91	92	92	89	....	81.5
	Minimum	55	60	61	54	53	51	43	47	51	53	63	64	63	60	65	65	59	51	48	60	60	58	57	53	50	51	51	58	61	63	....	56.3
Lost Creek	Maximum	86	85	82	68	60	69	75	79	85	89	89	85	86	89	84	87	82	75	74	72	73	69	73	75	78	81	88	89	89	85	....	80.0
	Minimum	52	62	61	54	55	50	48	40	50	51	64	63	61	60	64	65	61	58	59	60	59	53	55	52	51	46	49	55	61	62	....	56.0
Mannington	Maximum	83	83	80	71	59	68	75	74	80	86	87	84	88	82	84	87	78	70	71	69	71	68	70	73	75	79	82	85	87	83	....	77.7
	Minimum	54	61	61	53	53	51	41	46	52	52	62	60	62	61	65	64	63	50	46	58	58	58	55	53	49	49	49	57	60	64	....	55.6
Morgantown	Maximum	87	84	82	70	58	68	75	75	81	89	90	85	89	89	83	88	80	75	73	70	72	69	70	74	75	81	84	85	88	84	....	79.1
	Minimum	64	65	62	51	51	50	45	50	52	58	70	69	65	61	67	66	62	52	48	57	58	56	55	56	50	51	58	62	67	66	....	58.1
New Cumberland	Maximum																																
	Minimum																																
New Martinsville	Maximum	89	82	75	73	64	70	70	77	82	85	90	92	90	87	87	87	80	72	70	69	68	67	73	72	79	82	86	85	85	85	....	79.1
	Minimum	59	64	63	53	53	51	46	50	55	56	64	63	64	63	68	67	62	52	51	60	60	59	56	56	52	53	55	60	63	67	....	58.2
Parkersburg ***	Maximum	85	85	75	63	60	70	77	79	84	91	89	84	90	89	89	92	81	72	71	66	74	72	75	76	78	82	87	91	91	82	....	80.0
	Minimum	62	66	63	54	52	48	48	52	56	62	68	70	70	66	70	72	61	58	54	60	59	56	57	56	54	55	60	64	70	69	....	60.4
Parsons	Maximum	87	84	78	65	79	65	75	72	79	85	89	91	86	84	83	82	85	72	65	66	69	67	78	77	77	75	85	84	85	75	....	78.1
	Minimum	46	57	65	57	57	48	41	41	48	50	56	55	63	57	60	59	60	48	45	55	54	55	54	53	51	44	54	50	55	56	....	53.1
Philippi	Maximum	82	82	76	67	59	67	75	74	81	86	89	82	86	86	85	86	83	71	72	68	72	68	75	77	73	81	86	87	86	79	....	78.0
	Minimum	53	56	60	54	52	49	42	47	50	55	66	56	63	58	65	65	59	50	54	57	59	53	54	53	49	50	60	65	68	65	....	56.2
Pickens	Maximum	84	80	77	64	59	54	75	75	79	85	86	84	86	85	85	87	79	67	69	64	70	68	70	78	75	82	85	....	86	77	....	76.4
	Minimum	45	55	57	54	51	43	39	43	54	49	60	58	59	55	59	60	58	48	42	48	45	50	50	42	43	45	51	....	53	61	....	50.9
Terre Alta	Maximum	82	80	74	63	55	60	70	69	65	87	82	77	80	79	77	80	74	65	66	58	65	63	64	68	70	75	80	81	81	72	....	72.1
	Minimum	50	57	58	47	46	44	41	44	48	51	64	65	59	57	61	62	51	48	42	52	52	52	51	50	45	45	49	56	60	63	....	52.4
Wellsburg	Maximum	88	89	77	64	70	73	78	79	83	92	90	87	88	86	89	87	70	71	75	69	74	72	76	78	77	84	88	90	90	84	....	80.6
	Minimum	58	60	62	52	52	48	41	52	54	52	63	62	64	62	64	64	59	49	46	54	58	55	54	52	54	48	54	57	60	64	....	55.8
Weston	Maximum	83	82	80	70	60	68	76	75	83	87	88	84	88	84	83	88	84	72	73	70	73	70	72	78	77	81	85	87	88	83	....	79.1
	Minimum	55	63	63	54	56	51	44	47	51	54	65	64	64	61	67	67	64	53	48	58	59	55	55	52	53	50	52	59	64	64	....	57.1
Wheeling §	Maximum	92	92	77	59	60	78	83	81	89	96	96	89	95	91	92	92	81	74	79	65	77	75	73	76	85	86	92	95	94	79	....	83.1
	Minimum	62	62	65	55	52	51	46	50	54	57	67	67	68	62	66	72	63	51	51	60	60	57	57	53	52	53	54	60	65	70	....	58.7
Southern Division.																																	
Beckley	Maximum	80	83	71	73	69	70	76	81	82	84	88	80	87	84	85	86	85	77	78	75	75	74	76	80	78	81	81	85	87	80	....	79.7
	Minimum	49	59	62	59	48	40	55	55	54	59	58	62	64	64	62	66	54	49	50	57	53	54	48	52	49	55	54	60	68	62	....	56.0
Bluefield	Maximum	81	81	72	65	65	73	75	75	77	83	84	84	83	82	81	85	86	76	66	57	64	70	70	77	77	77	79	83	84	78	....	76.3
	Minimum	55	60	59	60	59	54	50	42	51	57	63	60	65	67	68	63	69	55	54	53	56	54	57	49	46	52	59	63	62	65	....	57.6
Charleston	Maximum	87	89	84	82	80	85	84	86	92	90	92	95	95	94	95	96	85	87	92	84	88	89	92	90	90	92	95	97	98	97	....	90.1
	Minimum	61	65	60	58	62	60	50	58	57	60	62	60	65	66	68	69	65	60	61	60	62	61	60	59	58	61	65	68	70	66	....	61.9
Gary §	Maximum	80	75	72	68	63	61	71	72	74	87	87	87	87	85	85	89	86	75	67	73	74	79	75	80	78	82	85	87	87	85	....	78.5
	Minimum	49	56	60	60	56	43	44	45	52	52	60	64	61	64	65	62	61	59	55	58	55	54	57	52	53	50	50	57	62	64	....	56.0
Green Sulphur Spgs	Maximum	83	78	80	69	66	70	80	79	83	88	89	88	89	88	84	88	85	73	63	64	75	73	77	78	80	81	85	87	89	85	....	79.9
	Minimum	47	48	51	60	55	46	43	42	48	57	60	61	60	62	62	61	58	56	49	55	57	53	55	52	53	48	55	52	53	59	....	53.9
Hinton §	Maximum	85	78	77	70	68	68	77	78	81	86	88	84	86	85	82	88	85	72	63	61	72	72	73	77	76	80	82	85	86	....	....	78.1
	Minimum	50	51	60	60	56	48	47	47	52	54	56	64	63	64	66	63	63	59	54	56	51	54	55	55	54	53	54	56	59	63	....	56.2
Holcomb	Maximum	81	80	75	67	63	66	77	77	79	85	86	85	85	84	79	87	79	68	64	63	70	70	71	78	75	82	82	86	86	82	....	77.1
	Minimum	44	54	55	59	55	48	36	42	45	45	58	59	57	59	60	56	57	54	44	47	55	47	51	40	48	45	45	51	54	55	....	50.8
Huntington §	Maximum	85	90	75	62	62	76	81	85	89	90	91	90	93	90	92	94	82	79	71	71	72	77	81	82	85	86	92	93	91	85	....	83.1
	Minimum	63	68	66	58	56	47	50	52	57	60	67	68	67	68	71	72	72	60	56	60	58	56	57	57	59	55	59	62	69	71	....	61.4
Lewisburg	Maximum																																
	Minimum																																
Marlinton	Maximum	76	78	74	66	68	62	70	70	74	80	82	80	78	80	78	80	76	70	60	52	66	64	66	72	70	72	76	80	82	80	....	72.8
	Minimum	44	48	50	50	50	46	36	40	44	52	56	58	52	56	60	54	52	48	40	46	48	44	48	44	42	42	42	46	52	54	....	48.1
Point Pleasant	Maximum	87	85	85	74	62	73	79	79	87	93	93	89	94	91	92	94	88	78	71	68	75	77	78	80	82	85	91	93	93	86	....	83.4
	Minimum	60	66	63	54	54	44	47	50	57	64	65	65	66	66	70	70	61	56	50	59	57	54	56	54	53	52	73	60	66	65	....	59.2
Powellton	Maximum	86	86	80	72	69	70	83	81	85	91	91	89	91	88	90	91	86	72	70	71	74	....	....	82	79	87	87	90	90	86	....	82.8
	Minimum	53	64	60	65	51	43	37	45	44	47	64	55	55	58	59	64	60	49	50	49	60	....	....	54	60	52	57	60	62	65	....	55.1
Robertsburg §	Maximum	87	86	75	67	62	75	80	84	88	81	89	86	90	90	89	90	89	77	75	69	73	77	76	77	82	85	90	91	90	83	....	81.8
	Minimum	52	64	64	56	55	44	45	50	55	60	64	65	62	65	70	66	69	57	53	50	55	53	54	56	56	53	56	61	65	66	....	58.0
Ryan	Maximum	86	81	76	68	65	66	76	80	83	88	90	88	90	86	88	90	80	82	76	67	72	72	72	79	80	81	86	89	89	84	....	80.3
	Minimum	51	61	62	58	50	41	43	45	48	61	62	60	64	63	62	62	60	56	49	55	58	53	56	49	55	49	54	59	61	61	....	55.6
Spencer §	Maximum	88	86	77	65	70	66	81	82	86	91	91	88	91	90	92	92	87	68	58	75	72	78	76	81	80	89	89	91	91	88	....	82.0
	Minimum	57	68	64	57	56	45	45	47	52	53	64	64	62	68	67	68	69	60	52	57	58	64	55	52	55	51	60	58	65	69	....	58.7
Sutton	Maximum																																
	Minimum																																
Union	Maximum	83	82	80	80	87	69	77	80	84	85	88	85	86	86	87	85	83	80	70	72	73	74	75	78	80	81	83	86	88	84	....	81.0
	Minimum	50	47	55	56	54	50	40	43	50	46	58	57	58	58	60	58	50	45	55	52	50	52	53	52	48	51	53	52	59	64	....	52.5
White Sulphur Spgs	Maximum																																
	Minimum																																
Williamson §	Maximum	81	84	80	71	63	68	78	78	81	84	88	86	87	85	88	88	84	70	68	70	71	73	75	78	76	81	83	86	86	85	....	79.2
	Minimum	58	62	65	67	60	52	50	52	58	60	65	70	67	68	70	68	69	61	57	59	60	58	60	60	60	57	68	65	67	67	....	61.7

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, June, 1920.



HWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY
DEC 21 1920

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

JULY, 1920

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
NOVEMBER 17, 1920

Departure of the Mean Temperature from the Normal, July, 1920.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

L.S

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVIII. PARKERSBURG, W. VA., JULY, 1920. No. 7.

GENERAL SUMMARY.

The past month was the coolest July since 1891, and was characterized by nearly continuously cool weather. There were only three or four uncomfortably warm days, while fires were needed for comfort during several nights. The rainfall was somewhat in excess and was unfavorably distributed over the State but favorably distributed throughout the month. Local storms caused considerable damage to crops, especially corn. Wheat was harvested under favorable conditions. At the close of the month corn and potatoes were in excellent condition and pastures and meadows were making good growth.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.04 and 30.02 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.28 inches on the 13th, and 29.70 inches on the 3d; Elkins, 30.30 inches on the 13th, and 29.67 inches on the 2d.

TEMPERATURE.

The monthly mean for the State 49 stations reporting, was 70.1°. The departure from the normal for 42 stations having ten or more years of record was —3.0. The month opened with the temperature normal, but the daily averages were below or practically normal from the 3d to the 29th, except the 23d–24th, with the lowest readings occurring on the 5th, 26th, and 27th. Moderately warm weather prevailed on the 23d–24th and 30th–31st.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 79 per cent; 8 p. m., 66 per cent. The July averages for the same hours for the past 32 years are 79 and 67 per cent, respectively. Elkins, 8 a. m., 89 per cent; 8 p. m. 76 per cent. The July averages for Elkins for the same hours for the past 20 years are 87 and 78 per cent, respectively.

PRECIPITATION.

The monthly mean for the State, 66 stations reporting, was 4.84 inches. The departure from the normal for 45 stations having ten or more years of record was +0.53 inch. The rainfall was heaviest over the central counties and lightest over the southern and extreme eastern counties. Rain was general on the 2–3d, 6–7th, 11th, 14–15th, 18–19th, 24–25th, and 31st, and the greatest amounts were received on the 3d, 7th, 11th, 15th, 19th, and 24–25th. Excessive rain fell over Gilmer and Lewis counties during the afternoon and evening of the 24th, causing much damage to corn on river bottoms. The river at Glenville reached a flood stage of 23.6 feet, while the upper West Fork River was exceptionally high. The river at Orlando was the highest for years.

HAIL.

Light hail fell in sections of Marshall, Nicholas, Randolph, Taylor, Upshur, and Webster counties on the 3d; Wetzel County on the 6th; Pleasants County on the 8th; Wirt, Gilmer, and Lewis counties on the 24th; and Wood County the 31st. Heavy hail fell in sections of Barbour and Randolph counties on the 3d. The storm moved from near Belington, Barbour County, in a southeast direction to Elkins, Randolph County, covering a territory about one mile wide. The hailstones ranged from the size of peas to 3½ inches in circumference, the heaviest part of the storm occurring at Belington, where the estimated loss to crops and roofs was $10,000. The total loss from this storm was approximately $15,000.

WIND.

The average wind velocity at Parkersburg was 4.6 miles per hour, or 0.1 mile above the July average for the past 30 years. The average at Elkins was 4.0 miles per hour, or 1.0 mile above the July average for 21 years. The highest velocity at Parkersburg was 32 miles per hour from the northwest on the 8th, and at Elkins 22 miles per hour from the southwest on the 24th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 73 per cent of the possible amount, or 12 per cent above the July averagefor 23 years. The average at Elkins was 46 per cent, or 8 per cent below the July average for 20 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 20th, 21st, 22d, 26th, 27th, 28th, and 29th; Creston, 2d, 8th, 10th, 20th, 21st, 22d, 27th, and 28th; Elkins, 2d, 5th, 6th, 10th, 13th, 14th, 16th, 17th, 20th, 21st, 22d, 26th, 27th, 28th, and 29th; Hinton, 9th, 21st, and 25th; Huntington, 17th and 28th; Mannington, 1st, 4th, 5th, 9th, 10th, 13th, 16th, 20th, 21st, 22d, 23d, 26th, 27th, 28th, and 29th; Robertsburg, 17th, 22d, and 27th; Rowlesburg, 10th, 13th, 21st, 22d, 26th, 27th, 28th, and 30th; Smithfield, 8th, 9th, 26th, and 27th; Stony River Dam, 3d; Weston, 10th, 20th, 27th, 28th, and 29th; Wheeling, 10th, 20th, 21st, and 22d.

Halos, lunar: Wheeling, 23d and 29th.

Thunderstorms (dates and number of stations reporting): 2d, 17; 3d, 15; 6th, 7; 7th, 5; 8th, 4; 9th, 1; 11th, 3; 14th, 7; 15th, 7; 18th, 8; 19th, 7; 23d, 1; 24th, 21; 25th, 4; 30th, 1; 31st, 10.

COMPARATIVE DATA FOR JULY.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	67.5	.....	.....	5.59	.....	.....	.....	.....	.....	.....
1892	73.4	98	41	4.20	.....	.....	.....	.....	.....	.....
1893	73.8	98	42	2.96	5.95	1.37	.....	20	10	1
1894	73.3	100	36	2.21	4.84	0.50	.....	10	19	2
1895	70.5	99	39	4.35	7.04	1.65	.....	11	13	7
1896	73.3	97	46	9.07	15.70	2.91	.....	9	12	10
1897	74.2	102	46	5.43	9.92	2.85	.....	11	12	8
1898	75.0	103	40	4.46	8.33	1.53	.....	12	7	12
1899	73.3	100	33	3.78	7.92	0.20	.....	14	10	7
1900	74.7	104	41	4.38	7.88	1.72	.....	15	11	5
1901	77.4	104	47	3.16	6.21	0.69	.....	14	12	5
1902	74.2	104	45	3.54	8.42	0.96	.....	14	12	5
1903	72.5	100	37	3.74	8.30	1.82	.....	16	10	5
1904	71.5	97	42	3.28	6.00	1.04	.....	14	12	5
1905	73.3	98	43	5.92	10.64	3.00	.....	12	11	8
1906	72.4	98	45	4.54	7.40	1.50	.....	12	11	8
1907	72.7	98	42	6.66	13.36	1.99	.....	12	14	5
1908	74.0	100	41	5.21	9.43	2.08	.....	14	13	4
1909	70.2	96	36	4.17	10.50	0.60	.....	14	11	6
1910	73.8	98	41	4.92	13.16	0.54	.....	13	12	6
1911	73.3	106	40	2.82	6.94	0.40	.....	16	12	3
1912	72.0	100	45	7.48	15.22	2.67	.....	12	12	7
1913	74.2	103	40	5.80	10.07	2.14	.....	15	12	4
1914	73.1	106	38	4.11	7.74	0.98	.....	16	10	5
1915	71.9	99	38	4.63	11.31	1.82	.....	12	11	8
1916	74.8	102	42	3.49	9.47	1.06	.....	16	8	7
1917	72.6	104	44	4.83	8.27	1.25	.....	14	10	7
1918	70.3	101	38	3.18	6.90	1.04	.....	17	7	7
1919	74.3	104	41	5.51	13.08	1.96	.....	18	7	6
1920	70.1	99	40	4.84	8.94	2.34	.....	16	8	7
Means and extremes ..	72.9	106	33	4.61	15.70	0.20	.....	14	11	6

Climatological data for July, 1920.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall (unmelted).	With precip. 0.01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	19																	G. C. Dixon.
Brandywine	Pendleton		4	68.8		94	24	42	5†	40	3.50		1.30	0	8	21	8	2	n.	Elmer Keister.
Burlington	Mineral	875	26	[9]68.6	−4.1	90	31	45	5†	36	3.86	−0.07	1.00	0	7	15	14	2	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	31								4.54	+0.97	0.98	0	8					S. W. Lightner.
Martinsburg	Berkeley	435	28	73.4	−2.0	95	23	53	26†	37	2.93	−0.96	0.90	0	7	24	4	3	se.	G. W. VanMetre, C. E.
Moorefield	Hardy	900	24	76.2	+2.1	96	31	46	5	46	3.58	+0.19	0.68	0	8	26[a]	3[a]	1[a]		M. S. Henkel.
Piedmont	Mineral	919	7	69.3		90	23	46	5†	33	3.81		1.19	0	10	16	8	7	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	22	71.4	−3.6	95	23	43	26	40	2.91	−0.66	0.63	0	9	13	13	5		Geo. E. Arnold.
Upper Tract	Pendleton	1,230	21	69.0	−3.1	93	24	42	5	42	2.75	−1.10	0.90	0	7	20	6	5	w.	J. M. Mallow.
Wardensville	Hardy	1,200	2	64.1[j]		85[j]	14	44[i]	26	30[n]	2.34		0.65	0	8	13[j]	2[j]	6[j]	se.	Luther F. Sutton.
Averages and extremes				70.1	−2.1	96	31	42	5†	46	3.36	−0.27	1.30	0	8	19	8	4	w.	
Northern Division.																				
Bens Run	Pleasants	622	18	71.2	−3.9	92	23	45	24	41	5.70	+1.21	1.45	0	10	19	9	3		J. D. Riggs.
Bruceton Mills	Preston	1,549																		Floyd Cale.
Buckhannon	Upshur	1,411	23	69.1	−3.0	88	24	47	25	30	7.10	+1.85	1.75	0	12	23	5	3		H. A. Darnall.
Cortland	Tucker	3,300	4								4.79		1.90	0	9	15	7	9		G. F. Harmon.
Creston	Wirt	701	18	72.5	−2.2	93	23	48	5†	37	4.30	+0.29	1.31	0	9	18	5	8	sw.	J. M. Reed.
Davis	Tucker	3,093	11								6.52		2.24	0	13	10	12	9	w.	Ross C. Male.
Elizabeth	Wirt	646	8								5.09		1.30	0	7					E. D. Ball.
Elkins	Randolph	1,947	19	66.4	−4.1	87	24	43	26	32	5.27	+0.63	1.74	0	12	5	13	13	w.	U. S. Weather Bureau.
Fairmont	Marion	883	14	71.2	−3.2	91	1†	47	26	34	6.73	+2.07	2.14	0	11	23	0	8	w.	F. P. Hall.
Glenville	Gilmer	738	26	73.8	−1.2	94	24	47	26	40	6.92	+1.68	3.25	0	11	22	8	1	w.	Howard R. Brannon.
Grafton	Taylor	1,000	27	70.0	−2.9	93	23	46	26	36	4.93	+0.06	1.45	0	10	15	10	6	e.	W. C. Byers.
Lost Creek	Harrison	1,026	22	69.4	−2.9	89	1	44	26†	40	4.67	−0.08	1.22	0	11	19	4	8	w.	Allen Smith.
Mannington	Marion	974	17	68.0	−4.3	86	23	44	5	32	7.44	+2.63	1.53	0	12	18	4	9	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	27	70.4	−3.2	87	23†	46	26	31	4.46	−0.86	1.32	0	7	8	13	10		Prof. E. L. Andrews.
Moundsville	Marshall	642	17	70.2	−4.2	93	23	46	5	36	6.36	+1.99	1.05	0	12	7	19	5	w.	G. W. Wright.
New Cumberland	Hancock	987	22																	Lockmaster.
New Martinsville	Wetzel	634	26	70.2	−5.3	89	23†	49	5	30	7.15	+2.43	1.40	0	9	21	5	5	s.	Wm. Ankrom.
Parkersburg	Wood	638	33	72.0	−3.6	92	23	53	5	28	4.56	−0.10	1.20	0	13	15	10	6	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	20	68.3[e]	−1.9	87[d]	14	45[e]	28†	39[e]	8.94	+4.00	3.85	0		14[d]	7[d]	6[d]		J. W. Swisher.
Philippi	Barbour	1,149	23	69.4	−3.1	88	23	44	26	33	5.86	+0.91	0.97	0	13	16	8	7	w.	Prof. Vernon E. Wood.
Pickens	Randolph	2,697	17	66.3[a]	−2.4	89[a]	24	40[a]	5†	38[a]	7.73	+1.40	2.95	0	12	18	9	4	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	33								6.24	+1.25	1.58	0	15					J. F. Pierce.
Saint Marys	Pleasants	577	11								4.84	+0.79	0.83	0	13				sw.	Wm. Hughes.
Smithfield	Wetzel	835	14	68.4	−4.0	87	1†	40	26	37	8.90	+3.73	2.70	0	13	22	5	4	sw.	G. M. Whistler.
Stony River Dam	Tucker		0	69.0[a]		88[a]	7	47	27	30[a]	5.62		2.02	0	11	9	7	15	w.	A. C. Becker.
Terra Alta	Preston	2,612	19	64.7[b]	−4.6	83[a]	1†	42[b]	6†	37[b]	8.30	+2.89	2.51	0	14	13[a]	7[a]	10[a]	w.	W. J. Grimm.
Wellsburg	Brooke	1,225	19	70.0	−1.9	90	13†	43	27	37	4.47	−0.13	1.58	0	10	19	6	6		George P. Pfister.
Weston	Lewis	1,026	24	69.9	−4.6	89	23	48	5	32	4.75	−0.23	1.55	0	14	10	15	6	n.	Weston State Hospital.
Wheeling	Ohio	645	33	72.4	−2.7	95	30	47	26	36	3.38	+0.13	0.77	0	13	15	10	6	w.	Miss M. B. Forsyth.
Averages and extremes				69.7	−3.3	95	30	40	5†	41	5.96	+1.24	3.85	0	11	16	8	7	w.	
Southern Division.																				
Alum Creek	Kanawha																			J. H. Allen.
Bancroft	Putnam	574	16	70.7	−4.4	91	23	50	10†	33	3.32	−0.76	1.13	0	12	22	1	8	se.	R. E. Dent.
Beckley	Raleigh	2,440	20	69.8	−1.5	90	24	45	26†	39	3.35	−0.92	1.02	0	9	15	11	5	w.	John A. Ewart.
Bluefield	Mercer	2,558	25	69.4	−2.2	87	24	48	26†	36	3.35	−1.20	1.30	0	7	17	10	4		Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	5								6.46		2.00	0	8	18	0	13	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	17	76.6	+0.1	99	23†	52	26	37	5.00	+0.88	1.25	0	9	17	4	10	w.	C. V. Lewis.
Clay	Clay	706	4								2.91		1.50	0	7					Prof. E. H. Knabenshue.
Cuba	Jackson	650	18	70.2	−3.3	91	23	48	25†	35	3.00	−1.09	0.70	0	9	10	21	0	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	4								4.93		0.96	0	12					Lockmaster.
Dam 20 O. R.	....do	551	4								3.86		1.02	0	10					Lockmaster.
Dam 22 O. R.	Jackson	538	5								5.21		1.80	0	12					Lockmaster.
Dam 26 O. R.	Mason	505	4								6.58		1.52	0	11					U. S. Engineer Office.
Evans	Jackson	606	8	71.0		90	24	52	5†	30	3.68		0.82	0	13	15	5	11		B. F. Sayre.
Gary	McDowell	1,426	4	71.6[c]		93[c]	24	50	6†	39[c]	3.55		0.85	0	11	6[a]	0[a]	24[a]		U. S. Coal & Coke Co.
Gassaway	Braxton																			H. A. Hays.
Green Sulphur Springs	Summers	1,600	24	70.8	−1.7	91	24	45	28	41	4.25	+0.42	1.55	0	11	13	9	9	w.	W. H. Gwinn.
Hinton	....do	1,450	23	70.0	−4.2	90	24	51	27	32	3.72	−0.23	1.02	0	9	17	1	13	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	8	67.0		89	24	42	26†	39	5.20		1.63	0	13	16	3	12		W. C. Williams.
Huntington	Cabell	538	26	74.4	−2.3	96	23	53	27	33	4.92	+0.71	1.46	0	10	20	4	7	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	1								4.65		1.20	0	7					J. O. Brown.
Kayford	Kanawha	1,335	4								4.16		1.36	0	8					Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	20	67.8	−3.3	88	24	46	26	33	3.90	−0.06	0.91	0	13	9	14	8	nw.	Geo. T. Argabate.
Logan	Logan	687	17																	W. C. Flanagan.
Madison	Boone	704	14																	S. E. Bradley.
Marlinton	Pocahontas	2,131	21	62.3	−7.1	84	24	40	26†	34	5.24	−0.07	1.22	0	10	2	26	3	sw.	S. L. Brown.
Miller	Fayette		0																	J. R. Bays.
Point Pleasant	Mason	553	27	72.8	−3.7	94	23	48	5†	34	5.17	+1.11	1.20	0	10	17	4	10		W. D. Holmes
Powellton[g]	Fayette	933	24	71.8	−2.5	99	24	50	27	35	3.56	−1.00		0		16	8	0		Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	4								4.91		1.96	0	8					Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	4								3.25		0.95	0	5					Wm. E. Hill.
Robertsburg	Putnam	574	20	72.4	−3.1	93	23	50	26†	35	3.31	−0.45	1.25	0	8	16	4	11	s.	E. C. Brace, Jr.
Ryan	Roane	709	15	69.7	−3.8	91	23†	46	27	36	5.62	+1.12	1.27	0	14	14	12	5		Wm. E. Ryan.
Sharples	Kanawha		0								3.98		1.30	0	9					F. E. Rippetoe.
Spencer	Roane	784	16																	A. M. McKown.
Sutton	Braxton	839	14																	Lawrence Freeman.
Union	Monroe	2,250	16	69.8	−1.3	90	24	48	5	37	4.36	−0.27	2.00	0	9					Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	10																	J. M. Ayres.
Williamson	Mingo	660	20	72.2	−3.5	90	24	54	26†	26	2.71	−1.63	0.75	0	9	20	7	4	w.	J. F. Keyser.
Averages and extremes				70.5	−3.0	99	23†	40	26†	41	4.27	−0.22	2.00	0	10	15	8	8	w.	
State averages and extrms.				70.1	−3.0	99	23†	40	5†	46	4.84	−0.52	3.85	0	10	16	8	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table, indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates.

Daily precipitation for July, 1920.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac											1.30	.15		.70	.10				T.					*	.50							3.50
Burlington	do		1.00	.34				.48				.56			T.	.38			.15	T.					.95								3.86
Harpers Ferry	do			.98	.15				.92				.62		.92	.53					.05												4.54
Martinsburg	do		*	.90				.54				.46			.43	.07								T.	.53							2.93
Moorefield	do		.66	.50								.68				.16		.05	.53						.60	.40							3.58
Piedmont	do		.60	.39				.09				.71			.02	.57			.12	.04					1.19	.08				T.			3.81
Romney	do		.63	.23				.48				.45				.25			.12	.10				.04	.61								2.91
Upper Tract	do		.10	.90				.10				.70				.10			.60						T.	.25							2.75
Wardensville	do						T.	.40	.60				.65			T.				.01	.03				*	*	.65						2.34
Northern Division.																																	
Bens Run	Ohio		1.45	.41			.11	.72	.66			1.17	.02			.90				.24					.02								5.70
Bruceton Mills	Monongahela																																
Buckhannon	do		1.60	.90			.08	.50	T.	.50		.60			.33	.27			T.	.15					1.75	.30						.12	7.10
Cortland	Monongahela		1.20	.22				.26								.45	.06		.22	.03					1.90	.45							4.79
Creston	Little Kanawha	.31		1.02	.33			.45	T.	.35		.03				.20	.30			T.						1.31							4.30
Davis	Monongahela	.06	.55	.80	.47			T	.58			.57	.12			.11	.60	.17		.13	.12					2.24							6.52
Elizabeth	Little Kanawha	.92		.93				1.14				.25					.49			.06						1.30							5.09
Elkins ***	Monongahela		.61	1.50			.03	.27				.60	.01		.05	.32	T.		T.	.04					1.55	.16						.13	5.27
Fairmont	do	.15		2.14	.60			.42	.26	T.		.48	.20			.45	.58			.06						1.39							6.73
Glenville	Little Kanawha			1.18	.63			.36	.22	.24		.12	.10			.46	.26			.10						3.25							6.92
Grafton	Monongahela		1.45	.71			T.	.90	T.			.68	.03		.10	.12				.12					*	.82							4.93
Lost Creek	do		.66	.78			.10	.66	T.	.03		.42			.20	.11			.23	T.					1.22	T.						.26	4.67
Mannington	do		1.53	.84			.10	1.01		T.		.49	T.		.08	1.22			.36	.52					.20	.93						.46	7.74
Morgantown	do		1.32	.42			T.	.21				.96			.12	1.03				.40					T.							T.	4.46
Moundsville	Ohio		1.05	.90			.10	.32	.90	.65		.50				.55				.70					.15	.12						.42	6.36
New Cumberland	do																																
New Martinsville	do		1.40	.40				.70				.70	.90						.90	1.10												.55	7.15
Parkersburg ***	do		.80	.50			.36	.44	.29			.66			.01	.88			.05	.13					.10	.09						.25	4.56
Parsons	Monongahela			*	*	*	*	*	*	*	3.04	.45			.55	.05									3.85							1.00	8.94
Philippi	do		.97	.55			.02	.60	.01	.11		.92			.20	.15				.30					.80	.80						.43	5.86
Pickens	do	.22	.14	1.30			.15	.81				.80			.19	1.12			.10	.25					2.40	.25						T.	7.73
Rowlesburg	do	.12		1.58	.34			.06	.20	.30		.15	.36	.05		.35	.39	.06		.31	.08					1.89							6.24
Saint Marys	Ohio	.33		.83	.42			.40	.73	.10		.68	.43	T.	.03	.13	.55			.16						.05							4.84
Smithfield	Fishing Creek	.15		2.70	.33			.51	.67	.08		.92	.15			.21	.87			.28						1.55						.48	8.90
Stony River Dam	Monongahela			1.35	.30				.37			.25	.68			.09	.21	.13		.12						2.02	.10						5.62
Terra Alta	do		2.51	.41			.01	.14				.73	.04		.35	1.00	.01		.09	.17					2.00	.48						.36	8.30
Wellsburg	Ohio		1.58	.18			T.	.26		.21		.24	.02			.16				.70				.02								1.10	4.47
Weston	Monongahela		.53	.57			.30	.49		.22		.45		.01	.27	.28	.01			.04					1.45	.10						.03	4.75
Wheeling	Ohio	.10		.77	.12			.35	.05	.25		.18	.20			.15	T.			.75				T.	.22	.19						.05	3.38
Southern Division.																																	
Alum Creek	Great Kanawha																																
Bancroft	do	.31	.02	1.13				.56	.02	.03		.02	.01			.52	.44			.15						.11							3.32
Beckley	do	.31						1.02	.42			.31	.29						.10	.13					.59							.18	3.35
Bluefield	do	T.	1.30					.15				.20			.05				.15	T.	.35					1.15							3.35
Camden-on-Gauley	do	.80	.33	2.00				.23				1.00							1.00						1.00						.10		6.46
Charleston	do	.20		1.25				.60	.30	.40		T.	.65			T.	.20			.15						1.25							5.00
Clay	do			.30					.45	.32			.03			.01					.30					1.50							2.91
Cuba	Sand Creek		.70	.20			.55	.50			.45				.05	.40			.05	T.				T.	.10							T.	3.00
Dam 19 O. R.	Ohio	.30		.90	T		.06	.96	.25	.48		.43	.49			.04	.85			.12						.05							4.93
Dam 20 O. R.	do	.09		.60				1.02	.53	.10		.38	.15			T.	.50		.02							.47							3.86
Dam 22 O. R.	do	.14	.10	1.80	.05			1.25	.05			.20	.34			.10	.38			.05						.75							5.21
Dam 26 O. R.	do	.50		1.40				1.52	.87	.20		.40	.40			.22	.20			.55						.32							6.58
Evans	Ohio	.20	.33	.25			.82	.28	.24			.28			.28	.26				.06					.54	.06						.08	3.68
Gary	Big Sandy	.60	.02	.85				.10	.75	.01		.16							.06	.16	.54					.30							3.55
Gassaway	Great Kanawha																																
Green Sulphur Spgs	do		.31	.73			.12	1.55				.10			.33	.21				.11	.15				.26	.38							4.25
Hinton	do		.24	1.02	.52			.04	.30			.04	.40							1.02						.14							3.72
Holcomb	do	.20	.26	.29	1.63			.76				.34	.04		.03	.81			*	*					.68	.16							5.20
Huntington	Ohio	.40	.04	1.42				.56	.34	.04			.52			.18				.62						.80							4.92
Kanawha Falls	Great Kanawha		.30	1.20	.70				.70	.20		T.									.35					1.20							4.65
Kayford	do	.08	.01	1.36	.16			T.	.91	T.			.16			T.	T.				.12					1.36	T.						4.16
Lewisburg	do	.19	.28	.91	.42		.03	.37				.55	.27		.35	.04			.17	T.					.11	.21							3.90
Logan	Guyandotte																																
Marlinton	Great Kanawha	.28	.42	.38			.12	1.02				1.22		T.		.48			.40	.06					.86								5.24
Miller																																	
Point Pleasant	Ohio		.38	.02			1.20	.90	.16			.36				.62				.57					.66						.30		5.17
Powellton	Great Kanawha	.13	*	*	2.02	*	*	*	*	*	*	.12			.07					.18						1.04							3.56
Raleigh	do		.40	.29			.06	.66	.77				.42							.35						1.96							4.91
Renick	do			*	.90			.60					.95													.80							3.25
Robertsburg	do	.35		1.25				.25	.15	.27		.12								.87						.05							3.31
Ryan	do	.40	.88	.61			.33	.34	.04			.15	.18		1.27	.48				.06					.51	.26						.11	5.62
Sharples	Coal River	.20	.10	.50				.65	.20			.15				.83				.05						1.30							3.98
Spencer	Little Kanawha																																
Sutton	Great Kanawha																																
Union	do	.10	.50	.10	2.00		.10	.11				.90			.05				.50														4.36
White Sulphur Spgs	do																																
Williamson	Big Sandy	.06		.75				.02	.38			.04	.20			.40				.22	T.				.64								2.71

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

* Precipitation included in next following measurement.

T. Trace, or less than 0.01 inch.

Daily temperatures for July, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum																																
	Minimum																																
Brandywine	Maximum	86	85	85	86	80	85	83	82	85	84	72	80	85	89	86	82	85	82	83	80	86	90	91	94	80	70	75	78	84	85	90	83.6
	Minimum	60	58	60	59	42	49	64	55	56	49	57	52	54	58	64	51	54	58	64	54	53	54	53	55	61	45	44	42	46	49	50	53.9
Burlington	Maximum	84	79	85	74	76	78	82	78	81	80	69	83	84	88	78	80	79	80	79	77	82	84	89	85	76	70	73	78	82	88	90	80.4
	Minimum	58	58	64	56	45	52	63	60	58	55	62	59	56	59	65	54	59	56	60	54	55	55	60	68	60	45	57	47	50	55	54	56.7
Martinsburg §	Maximum	90	87	89	79	81	84	89	82	86	86	79	87	88	91	83	83	82	86	88	85	88	91	95	89	80	70	80	85	88	93	94	85.7
	Minimum	65	63	63	66	55	56	63	64	62	63	64	63	62	62	65	60	60	62	68	62	58	62	66	67	66	53	54	53	54	56	59	61.2
Moorefield	Maximum	90	88	89	88	92	85	90	85	85	81	89	90	95	85	86	84	87	88	82	89	92	91	91	91	80	80	76	88	95	95	96	87.6
	Minimum	62	59	63	59	46	53	70	62	74	55	68	69	68	74	72	64	65	68	71	61	64	67	69	72	66	70	57	63	65	68	66	64.8
Piedmont	Maximum	86	80	84	73	80	77	83	80	81	80	70	83	81	89	77	79	78	84	80	80	87	89	90	87	72	74	75	78	84	87	89	81.2
	Minimum	60	57	63	60	46	52	63	65	59	54	60	61	56	59	69	53	56	57	63	57	55	55	62	67	62	46	49	48	51	54	61	57.4
Romney	Maximum	90	91	90	88	82	83	88	84	87	85	80	87	90	93	84	81	84	88	83	85	90	92	95	90	85	77	79	82	90	93	94	86.8
	Minimum	59	58	57	57	45	52	65	62	58	54	50	61	56	59	59	53	58	57	60	55	52	56	61	63	58	43	50	47	50	60	63	56.1
Upper Tract	Maximum	84	84	84	84	84	83	83	83	83	83	82	82	84	90	86	86	87	87	82	83	84	87	90	93	87	83	82	81	82	88	90	84.9
	Minimum	57	56	55	48	42	49	50	49	50	49	53	57	53	60	65	65	64	65	50	48	51	53	58	68	51	50	44	43	46	46	49	53.0
Wardensville	Maximum	78			70	67	78	78	77			74	72	84	86	78			85	78	67	74	77			63	68	65	69	76			74.5
	Minimum	57	57			55	50	55	60	60			52	55	70	72	53			58	50	50	50	52			44	45	45	46	45		53.7
Northern Division.																																	
Bens Run	Maximum	89	73	85	79	80	83	78	81	80	81	79	84	90	86	83	83	88	86	77	82	85	87	92	86	75	75	79	84	85	91	90	83.1
	Minimum	66	62	60	61	54	58	67	59	58	58	65	63	65	65	65	59	57	62	63	58	58	61	65	45	49	50	52	55	57	59	66	59.2
Buckhannon	Maximum	82	80	83	72	72	84	80	78	79	78	75	80	84	84	75	79	80	83	75	76	79	81	87	88	75	74	72	77	82	83	85	79.4
	Minimum	67	60	62	60	48	54	66	64	59	54	64	66	66	63	69	63	59	58	65	53	54	52	58	75	47	50	48	48	53	55	62	58.8
Creston	Maximum	87	83	88	79	85	87	80	85	82	85	80	87	89	85	85	84	87	86	76	86	86	90	93	89	82	77	79	86	90	91	92	85.2
	Minimum	66	63	64	58	48	56	66	59	60	54	64	62	59	63	67	55	58	60	64	58	71	55	61	71	62	48	49	59	58	55	62	59.8
Elkins ***	Maximum	80	78	79	68	75	82	77	76	76	77	74	78	83	83	73	76	78	80	72	76	78	83	85	87	70	68	71	78	80	83	84	77.7
	Minimum	61	57	60	54	45	50	65	62	57	53	62	60	54	58	59	50	56	55	59	52	52	52	60	64	51	43	48	47	49	53	58	55.0
Fairmont §	Maximum	91	77	85	78	83	85	81	82	83	87	75	85	90	87	82	82	85	86	74	82	87	88	91	85	79	73	80	85	87	91	88	83.7
	Minimum	65	61	64	58	49	55	61	61	59	55	61	62	59	62	68	56	55	58	66	56	56	55	62	73	61	47	51	52	54	57	65	58.8
Glenville §	Maximum	90	91	90	89	90	89	88	85	85	85	87	87	93	90	93	86	87	88	87	94	89	90	93	94	80	80	88	86	90	92	90	88.6
	Minimum	65	64	66	58	50	55	57	60	59	56	64	61	60	63	68	55	59	59	64	58	56	56	62	71	61	47	51	57	54	56	60	59.1
Grafton	Maximum	90	77	75	69	82	84	79	83	82	82	77	84	91	85	82	81	86	88	73	82	86	89	93	85	76	72	78	85	89	91	81	82.5
	Minimum	65	60	62	56	47	55	64	61	60	55	62	63	58	61	61	56	56	57	65	58	55	54	64	68	50	46	49	49	53	55	62	57.6
Lost Creek	Maximum	89	76	84	74	82	76	73	80	80	82	78	82	88	85	89	82	81	85	77	80	84	87	88	84	75	73	81	84	85	87	86	81.6
	Minimum	65	57	63	56	57	62	60	58	57	52	63	62	56	60	68	52	54	55	63	55	52	50	63	70	61	44	44	49	53	53	61	57.3
Mannington	Maximum	84	79	82	72	74	78	76	77	79	79	73	80	84	83	78	77	79	83	70	75	79	83	86	85	74	71	74	79	82	85	85	78.9
	Minimum	64	58	63	56	44	53	64	60	55	53	62	60	58	60	67	54	54	55	62	54	55	57	62	73	59	45	47	48	51	53	61	57.0
Morgantown	Maximum	84	82	84	74	78	81	82	78	80	81	72	76	84	83	81	78	82	85	78	76	82	84	87	87	76	77	78	80	82	86	85	80.7
	Minimum	62	63	64	59	47	59	67	61	61	54	62	65	62	66	66	58	56	72	62	57	56	57	68	70	58	46	48	52	58	63	68	60.2
New Cumberland	Maximum																																
	Minimum																																
New Martinsville	Maximum	83	82	74	74	77	78	77	76	76	75	74	81	85	85	82	79	82	80	75	79	82	87	89	89	78	73	75	83	84	86	85	80.2
	Minimum	66	61	62	60	49	56	66	59	58	57	64	64	62	64	68	57	56	58	63	58	56	60	65	77	61	59	52	53	55	58	64	60.3
Parkersburg ***	Maximum	85	76	88	75	79	80	78	81	78	78	78	85	88	86	89	82	84	85	73	78	83	87	92	87	74	72	75	82	87	91	90	81.8
	Minimum	68	67	65	62	53	60	68	60	60	57	66	67	65	71	65	60	61	65	64	60	56	60	67	71	59	54	55	55	59	64	65	62.2
Parsons	Maximum	85	76	80		78	81	84	78	81	80	77				87	83	72	74	80		78	82	85	86	86	77	76	75	82	84	84	86	80.6
	Minimum	63	56	61			48	63	61	51	53	59				57	54	55	64	55		55	54	58	58	61	56	49	58	45	54	57	56.0
Philippi	Maximum	87	84	82	72	78	82	80	78	78	79	75	80	87	84	77	78	80	82	75	79	82	85	88	84	75	70	75	82	83	84	85	80.3
	Minimum	66	61	62	60	45	55	67	61	59	52	63	68	59	62	67	52	56	62	64	59	58	55	56	67	58	44	46	49	57	57	64	58.4
Pickens	Maximum	79	78	81		78	84	76	76	80	82	77	81	83	85	71	79	83	83	70	78	83	85	86	89	73	71	73	79	83	84	85	79.8
	Minimum	59	55	59		40	50	64	58	54	48	60	56	55	58	53	48	54	60	61	45	50	48	58	54	51	40	42	45	49	55	56	52.8
Terra Alta	Maximum	83	73	76	68	73	79	74	73	73	77	69	75	80	77	71	72	75	79	71	74	77	80	83	76	67	65	76	70		80	79	74.8
	Minimum	65	55	58		50	42	66	58	55	48	58	60	53	58	63	53	52	55	58	56	49	51	62	63	56	42	45	45		49	58	54.6
Wellsburg	Maximum	88	81	86	78	81	80	82	81	79	82	74	85	90	89	85	78	84	87	73	82	86	82	90	88	78	71	80	85	86	90	87	82.9
	Minimum	55	61	63	57	45	53	65	59	57	53	60	60	60	61	67	55	48	57	61	54	58	63	63	73	58	45	43	48	49	58	61	57.1
Weston	Maximum	86	78	85	75	77	81	79	79	79	79	75	82	87	86	79	81	82	84	75	78	82	85	89	88	76	71	74	81	84	86	87	81.0
	Minimum	67	61	64	59	48	54	66	61	59	55	64	64	58	64	69	55	57	59	64	55	55	54	65	67	61	49	49	49	53	56	63	58.8
Wheeling §	Maximum	91	73	87	81	82	80	83	83	84	84	76	89	92	92	90	84	87	90	72	84	91	91	93	94	80	79	82	87	90	95	92	85.7
	Minimum	63	64	62	60	49	53	63	64	56	57	59	63	63	62	65	57	53	59	62	54	58	62	65	72	60	47	48	54	55	59	63	59.1
Southern Division.																																	
Beckley	Maximum	84	85	84	80	77	86	81	80	83	81	81	86	85	85	81	80	82	82	85	82	84	83	86	90	76	80	81	80	85	85	89	82.9
	Minimum	60	61	61	49	51	58	66	57	52	64	57	57	58	63	54	55	61	66	54	55	54	59	68	62	47	45	45	51	53	54	62	56.7
Bluefield	Maximum	81	83	82	82	83	79	69	78	79	76	79	79	83	83	77	78	81	80	77	77	80	84	85	87	85	84	74	78	80	84	84	80.4
	Minimum	65	63	65	55	53	54	61	59	55	60	65	57	57	63	64	59	60	58	60	57	55	59	69	64	48	48	55	56	56	56	56	58.4
Charleston	Maximum	93	88	89	93	95	92	92	88	80	81	82	89	96	95	90	95	93	92	89	90	94	95	99	95	92	88	89	88	86	92	92	90.8
	Minimum	69	67	66	65	61	62	63	62	61	59	60	62	65	70	67	58	59	64	62	61	60	64	65	73	62	52	54	53	60	60	65	62.3
Gary §	Maximum	86	83	86	80	83	89	82	81	81	82	80	83	87	83	82	83				80	84	87	89	93	77	75	78	83	85	87	90	83.5
	Minimum	66	65	65	65	55	50	66	63	58	56	61	60	60	59	63	65	59	60	66	62	59	59	59	66	65	52	50	53	51	56	56	59.7
Green Sulphur Spgs	Maximum	85	85	86	85	85	85	82	81	80	81	82	84	86	90	83	85	85	80	81	80	83	86	90	91	77	78	79	86	84	87	84	83 7
	Minimum	62	63	64	58	51	52	65	62	60	62	54	59	58	58	61	56	55	56	58	59	56	56	55	62	60	60	58	45	52	56	60	57.9
Hinton §	Maximum	82	72	84	76	79	84	80	79	81	80	76	80	84	85	81	82	83	78	80	79	83	85	88	90	78	73	76	78	84	78	88	80.8
	Minimum	66	67	62	62	55	55	57	59	60	58	58	61	60	62	63	60	60	60	64	59	59	59	60	63	65	53	51	52	52	53	59	59.2
Holcomb	Maximum	82	79	85	72	80	83	79	78	79	82	79	81	83	85	78	80	82	80	74	79	82	84	88	89	73	72	74	79	84	84	87	80.5
	Minimum	57	60	61	55	46	50	65	66	54	48	61	54	53	55	61	47	57	54	58	53	52	49	55	60	60	42	42	45	45	48	49	53.6
Huntington §	Maximum	86	80	90	84	82	86	81	85	84	84	83	89	92	88	85	85	90	84	81	86	87	90	96	95	82	80	81	87	89	92	91	86.3
	Minimum	69	69	68	65	56	63	68	62	61	60	60	61	62	69	70	58	64	66	67	60	60	60	65	72	62	54	53	54	56	60	62	62.5
Lewisburg	Maximum	82	75	81	73	78	82	79	76	79	80	78	81	82	83	76	75	79	79	77	77	81	84	85	88	75	72	75	77	80	84	84	79.3
	Minimum	65	63	60	58	47	52	64	58	55	51	63	59	56	58	62	60	52	59	65	55	55	53	55	65	63	46	49	49	48	51	52	56.4
Marlinton	Maximum	80	82	78	76	70	72	74	72	70	76	70	72	76	78	76	74	76	74	70	74	80	78	82	84	66	70	72	74	76	78	80	75.2
	Minimum	60	58	58	54	42	48	54	48	46	48	50	46	52	52	50	46	48	50	54	48	52	50	48	60	46	40	40	40	44	48	52	49.4
Point Pleasant	Maximum	87	83	91	84	80	82	81	84	83	84	80	86	91	90	85	88	88	86	80	82	87	90	94	93	80	76	80	85	89	92	92	85.6
	Minimum	68	66	66	59	48	57	66	59	56	54	64	64	62	69	68	56	59	64	63	55	57	59	64	70	60	48	49	52	56	58	64	60.0
Powellton	Maximum	83			87						83	77	86	89	91	85	85	87	82	78	83	87	89	90	99	85	77	78	83	88	90	91	85.5
	Minimum	68			52						56	53	59	60	63	68	54	68	52	67	56	57	57	58	71	54	51	50	52	53	55	58	58.0
Robertsburg §	Maximum	83	89	87	80	84	86	81	84	80	83	80	85	90	86	82	84	88	85	76	83	88	89	93	92	87	76	80	85	90	91	90	85.1
	Minimum	68	62	65	61	51	56	66	59	59	55	61	62	61	66	70	55	61	62	60	57	55	57	64	72	63	50	50	50	55	56	60	59.6
Ryan	Maximum	83	75	86	75	78	85	78	82	81	82	76	84	88	86	80	83	86	84	75	83	84	86	91	91	76	77	77	81	86	83	86	82.2
	Minimum	66	63	62	56	47	54	65	59	49	52	62	60	63	61	61	52	58	59	63	55	50	52	60	71	62	48	46	48	50	53	66	57.2
Spencer §	Maximum																																
	Minimum																																
Sutton	Maximum																																
	Minimum																																
Union	Maximum	85	80	82	81	83	84	85	85	82	85	84	80	86	85	86	83	83	84	85	86	85	86	89	90	86	87	78	81	85	89	89	84.5
	Minimum	66	50	61	58	48	50	52	58	52	55	53	60	56	58	60	55	53	54	56	59	58	55	56	68	55	50	49	49	52	52	55.1
White Sulphur Spgs	Maximum																																
	Minimum																																
Williamson §	Maximum	85	78	85	79	79	88	81	79	78	79	77	81	85	85	82	81	83	76	79	79	81	84	88	90	75	73	73	78	82	85	87	81.1
	Minimum	69	70	67	67	60	62	65	65	65	60	60	60	65	67	69	65	65	65	68	60	60	63	64	68	68	54	54	55	58	61	62	63.3

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, July, 1920.



WWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

LIBRARY
FEB 8 1921

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

AUGUST, 1920

BY
HENRY C. HOWE
METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
DECEMBER 15, 1920

Departure of the Mean Temperature from the Normal, August, 1920.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVIII. PARKERSBURG, W. VA., AUGUST, 1920. No. 8.

GENERAL SUMMARY.

August was slightly cooler and somewhat wetter than usual. While the rainfall was favorably distributed throughout the month the distribution over the State was unfavorable. The month was free from periods of abnormally high temperatures and destructive storms. The temperatures from day to day, both highest and lowest, were nearly the same and higher temperatures have been recorded at most of the stations during every other August of record. Owing to frequent rains, farm work was much retarded and shocked oats and wheat were somewhat damaged by the wet weather. The general rains at the close of the first decade were decidedly favorable for corn. At the close of the month corn was generally in excellent condition, early potatoes were of good quality and yielding well, wheat and oats were being thrashed, and fall plowing was advancing rapidly.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.06 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.26 inches on the 18th, and 29.86 inches on the 21st. Elkins, 30.25 inches on the 26th, and 29.82 inches on the 31st.

TEMPERATURE.

The monthly mean for the State, 50 stations reporting, was 71.1°. The departure from the normal for 43 stations having ten or more years of record was —0.6°. The month opened decidedly cool and the temperature was somewhat below the normal from the 22d to the 25th, with the lowest readings occurring generally on the 3d. The 8th and last two days were moderately warm, while the temperatures from the 8th to the 21st were generally slightly above the normal.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 85 per cent; 8 p. m., 75 per cent. The August averages for the same hours for the past 32 years are 81 and 70 per cent, respectively. Elkins, 8 a. m., 92 per cent; 8 p. m., 84 per cent. The August averages for Elkins for the same hours for the past 20 years are 89 and 80 per cent, respectively.

PRECIPITATION.

The monthly mean for the State, 68 stations reporting, was 4.25 inches. The departure from the normal for 46 stations having ten or more years of record was —0.37 inch. The rainfall was heaviest over the central and eastern counties and lightest over the western counties. The month opened rainy and rain occurred daily in many localities from the 6th to the 22d—an abnormally long wet period. Moderately heavy rain occurred on the 9–10th and 10–20th. Showers also were received from the 28th to the 30th.

HAIL.

Light hail fell in portions of Webster County on the 31st.

WIND.

The average wind velocity at Parkersburg was 3.8 miles per hour, or 0.4 mile below the August average for the past 30 years. The average at Elkins was 2.8 miles per hour, or 0.5 mile below the August average for 21 years. The highest velocity at Parkersburg was 22 miles per hour from the southwest on the 7th, and at Elkins 17 miles per hour from the west on the 31st.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 62 per cent of the possible amount, or 6 per cent above the August average for 23 years. The average at Elkins was 29 per cent, or 23 per cent below the August average for 21 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 29th; Elkins, 3d, 4th, 5th, 8th, 12th, 21st, 25th, 26th and 29th; Evans, 3d; Grafton, 24th; Hinton, 8th, 13th, 25th, 28th, and 30th; Mannington, 3d, 15th, 18th, 25th, and 29th; New Cumberland, 2d, 3d, 4th, 5th, 6th, 12th, 17th, 24th, 25th, and 26th; Parkersburg, 11th; Romney, 1st, 3d, 4th, 5th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 16th, 17th, 18th, 25th, 26th, and 27th; Rowlesburg, 3d, 6th, 13th, 18th, 25th, 26th, and 29th; St. Marys, 3d, 25th, and 26th; Stony River Dam, 19th, 20th, 21st, and 28th; Wellsburg, 3d; Weston, 3d, 12th, and 25th; Wheeling, 3d and 26th; Williamson, 26th.

Halos, lunar: Wheeling, 28th and 29th.

Halo, solar: Parkersburg, 10th.

Thunderstorms (dates and number of stations reporting): 1st, 6; 2d, 1; 6th, 4; 7th, 9; 8th, 10; 9th, 5; 10th, 5; 11th, 1; 12th, 5; 13th, 3; 14th, 3; 15th, 5; 16th, 1; 17th, 1; 18th, 1; 19th, 6; 20th, 2; 21st, 3; 23d, 1; 28th, 4; 29th, 7; 30th, 4; 31st, 4.

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	69.8	..	..	5.48	....	....	....	..	..	..
1892	72.1	96	41	2.55	....	....	....	..	..	..
1893	70.8	98	41	3.38	....	....	....	..	..	..
1894	71.5	103	38	2.07	5.15	0.27	....	14	12	5
1895	73.3	104	40	3.01	7.69	1.15	....	15	11	5
1896	72.6	97	40	2.82	5.69	0.88	....	15	12	4
1897	70.9	100	42	2.91	5.93	0.77	....	13	14	4
1898	73.7	96	44	7.51	11.57	4.40	....	12	12	7
1899	73.5	100	34	2.64	6.37	0.34	....	15	11	5
1900	76.0	100	45	3.15	7.20	1.03	....	17	10	4
1901	73.6	98	43	5.14	13.70	1.64	....	10	13	8
1902	70.4	98	35	2.40	6.05	0.97	....	15	13	3
1903	71.4	105	38	2.64	5.85	0.99	....	12	13	6
1904	70.7	95	32	2.88	6.71	0.67	....	15	10	6
1905	71.3	96	40	4.25	8.32	1.32	....	14	11	6
1906	75.4	98	47	5.15	10.72	2.18	....	10	13	8
1907	69.4	93	41	4.64	10.12	1.55	....	13	10	8
1908	70.9	101	37	2.82	5.63	0.84	....	15	10	6
1909	70.8	99	37	3.03	5.79	0.81	....	16	10	5
1910	70.8	98	39	2.03	5.58	0.70	....	17	10	4
1911	73.5	105	40	6.71	12.14	2.38	....	13	10	8
1912	69.3	95	35	3.64	11.70	0.25	....	10	13	8
1913	72.7	102	37	3.18	8.20	0.79	....	19	7	5
1914	71.8	100	40	4.86	9.29	1.38	....	15	9	7
1915	69.4	99	36	4.84	8.36	2.46	....	10	11	10
1916	72.9	104	40	4.76	15.35	1.46	....	14	9	8
1917	71.6	102	39	3.53	8.80	0.94	....	17	8	6
1918	76.0	110	43	3.96	9.15	0.63	....	17	8	6
1919	70.2	100	40	4.54	8.67	0.95	....	16	9	6
1920	71.1	95	42	4.27	9.28	1.69	....	9	10	12
Means and extremes ..	71.9	110	32	3.83	15.35	0.25	....	14	11	6

Climatological Data for August, 1920.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	4	70.5	.....	89	10	52	10†	37	5.97	.....	1.95	0	12	12	10	9	sw.	Elmer Keister.
Burlington	Mineral	875	26	70.0	+ 1.0	85	7†	46	3†	33	7.00	+3.08	1.48	0	11	2	27	2	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	31	.....	.....	.....	.....	.....	.....	.....	4.99	+1.21	2.30	0	13	.....	.....	.....	.....	S. W. Lightner.
Martinsburg	Berkeley	435	28	72.9	− 0.1	93	8	50	3†	34	3.68	−0.20	1.38	0	9	13	7	11	e.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	24	75.7	+ 2.5	95	8	54	3	28	6.51	+3.45	1.10	0	17	25	2	4	.....	M. S. Henkel.
Piedmont[1]	Mineral	919	7	68.8	.....	89	.....	47	3	30	6.82	.....	.....	0	.....	5	5	11	se.	C. A. Suter, Jr.
Romney	Hampshire	824	22	71.2	− 1.8	92	8	45	3	38	5.56	+2.01	1.50	0	18	4	19	8	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	21	69.2[a]	− 0.8	90[a]	8	44[a]	3	36[a]	7.00	+3.40	1.70	0	13	7	8	16	w.	J. M. Mallow.
Wardensville	Hardy	1,200	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Luther F. Sutton.
Averages and	extremes	.....	....	71.2	+ 0.2	95	8	44	3	38	5.98	+2.16	2.30	0	13	10	12	9	w.	
Northern Division.																				
Bens Run	Pleasants	622	18	73.0	− 0.9	91	5†	51	2	33	3.16	−1.14	0.95	0	8	21	4	6	.....	J. D. Riggs.
Bruceton Mills	Preston	1,549	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. M. Wolf.
Buckhannon	Upshur	1,411	23	69.7	− 0.6	85	8†	50	3	29	3.30	−0.81	0.90	0	7	24	4	3	.....	H. A. Darnall.
Cairo	Ritchie	680	21	71.3	− 1.6	90	8	47	3	33	2.99	−0.68	1.17	0	12	10	13	8	.....	O. C. Hess.
Cortland	Tucker	3,300	4	.....	.....	.....	.....	.....	.....	.....	5.26	.....	0.85	0	13	1	22	8	.....	Samuel Harmon.
Creston	Wirt	701	18	73.4	0	93	8	46	3	39	3.88	+0.46	1.16	0	10	10	7	14	sw.	J. M. Reed.
Davis	Tucker	3,093	11	.....	.....	.....	.....	.....	.....	.....	3.96	.....	0.95	0	17	7	16	8	w.	Ross C. Male.
Elizabeth	Wirt	646	8	.....	.....	.....	.....	.....	.....	.....	4.84	.....	1.74	0	10	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	19	68.1	− 0.3	85	8	46	3	33	3.33	−0.32	0.90	0	18	0	11	20	se.	U. S. Weather Bureau.
Fairmont	Marion	883	14	73.4	+ 0.3	93	8	52	3	35	7.48	+4.08	3.47	0	14	16	6	9	w.	F. P. Hall.
Glenville	Gilmer	738	26	75.2	+ 3.7	95	8†	48	3	38	2.45	−1.50	0.60	0	10	19	9	3	w.	Howard R. Brannon.
Grafton	Taylor	1,000	27	72.4[a]	+ 0.7	92[a]	8	49	3	36[a]	2.82	−1.14	.....	0	14	4	19	8	sw.	W. C. Byers.
Lost Creek	Harrison	1,026	22	71.2	+ 0.2	90	9†	45	3	35	1.69	−2.36	0.48	0	9	7	16	8	w.	Allen Smith.
Mannington	Marion	974	17	69.6	− 1.4	85	8	47	3	29	4.55	+0.66	1.22	0	19	8	10	13	sw.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	27	71.9[a]	− 0.4	91[a]	8	48[a]	3	32[a]	6.71	+2.38	1.70	0	12	2	13	16	.....	Prof. E. L. Andrews.
Moundsville	Marshall	642	17	73.0	+ 0.2	91	8	49	2†	33	2.07	−1.52	0.98	0	6	3	28	0	sw.	G. W. Wright.
New Cumberland	Hancock	987	22	70.3	− 0.6	88	8	49	3	32	3.11	−0.39	0.76	0	11	16	8	7	s.	M. F. Smith.
New Martinsville	Wetzel	634	26	72.0	− 2.2	91	15	51	2	26	4.30	+0.76	1.00	0	8	19	3	19	s.	Wm. Ankrom.
Parkersburg	Wood	638	33	72.9	− 0.4	88	8	52	3	27	2.65	−0.88	1.08	0	10	9	6	18	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. W. Swisher.
Philippi	Barbour	1,149	23	71.0	− 0.7	89	6†	47	3	32	2.32	−1.79	0.93	0	10	9	13	9	w.	Prof. Vernon E. Wood.
Pickens	Randolph	2,697	17	65.7	− 0.2	86	8	43	3	36	8.42	+3.43	2.00	0	17	10	10	11	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	33	.....	.....	.....	.....	.....	.....	.....	4.71	+0.86	1.10	0	16	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	11	.....	.....	.....	.....	.....	.....	.....	2.69	−2.25	0.73	0	8	.....	.....	.....	sw.	Wm. Hughes.
Smithfield	Wetzel	835	14	68.2	− 3.0	87	8	47	3	31	3.04	−1.52	0.88	0	14	18	11	2	se.	G. M. Whisler.
Stony River Dam	Tucker	.....	0	67.2[a]	.....	86[a]	8	50	2†	30[a]	9.28	.....	2.14	0	20	5	3	23	w.	A. C. Becker.
Terra Alta	Preston	2,612	19	66.2	− 1.8	84	8	44	3	34	6.56	+1.75	1.88	0	18	9	12	10	w.	Dr. C. O. Gorby.
Wellsburg	Brooke	1,225	19	70.8	+ 0.4	90	7†	46	2	38	5.43	+1.65	1.95	0	16	13	9	9	.....	George P. Pfister.
Weston	Lewis	1,026	24	71.6	− 1.5	89	21	48	3	33	3.24	−0.71	1.16	0	11	3	15	13	ne.	Weston State Hospital
Wheeling	Ohio	645	33	73.4	0	93	8†	51	3	36	2.98	−0.71	0.55	0	14	7	12	12	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	71.0	− 0.5	95	8†	43	3	39	4.19	−0.07	3.47	0	13	10	11	10	w.	
Southern Division.																				
Alum Creek	Kanawha	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Allen.
Bancroft	Putnam	574	16	71.5	− 2.3	87	8†	48	3	33	3.39	−1.09	0.98	0	14	10	1	20	s.	R. E. Dent.
Beckley	Raleigh	2,440	20	70.4	+ 0.5	86	13†	49	24	34	3.09	+0.02	1.03	0	8	7	10	14	w.	John H. Ewart.
Bluefield	Mercer	2,558	25	68.1	− 3.0	82	1	48	3	26	8.39	+4.21	1.75	0	22	3	20	8	.....	Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	5	.....	.....	.....	.....	.....	.....	.....	5.54	.....	1.60	0	8	7	0	24	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	17	74.0	− 1.7	93	18	52	3	36	3.33	−1.06	0.93	0	10	12	2	17	e.	C. V. Lewis.
Clay	Clay	706	4	.....	.....	.....	.....	.....	.....	.....	2.00	.....	1.46	0	6	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	18	71.4	− 0.8	89	6	46	3	40	1.76	−1.25	0.56	0	6	6	21	4	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	4	.....	.....	.....	.....	.....	.....	.....	2.37	.....	0.85	0	11	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	4	.....	.....	.....	.....	.....	.....	.....	4.18	.....	1.58	0	9	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	5	.....	.....	.....	.....	.....	.....	.....	2.33	.....	0.50	0	9	.....	.....	.....	.....	Lockmaster.
Dam 26 O. R.	Mason	505	4	.....	.....	.....	.....	.....	.....	.....	3.59	.....	1.25	0	8	.....	.....	.....	.....	U. S. Engineer Office.
Evans	Jackson	606	8	72.5	.....	88	12	50	3	27	3.53	.....	0.94	0	7	9	7	15	.....	B. F. Sayre.
Gary	McDowell	1,426	4	71.6	.....	89	4	50	3	37	6.29	.....	1.32	0	20	2	0	29	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Hinton	..do	1,450	23	70.2	− 2.7	86	11	50	3	28	6.58	+2.81	1.50	0	20	6	0	25	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	8	68.4	.....	86	8†	42	3	35	4.64	.....	1.75	0	18	5	9	17	.....	W. C. Williams.
Huntington	Cabell	538	26	74.8	0	92	5	53	3	34	2.96	−0.78	0.96	0	11	8	7	16	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	1	.....	.....	.....	.....	.....	.....	.....	2.57	.....	0.73	0	5	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	4	.....	.....	.....	.....	.....	.....	.....	3.12	.....	0.88	0	14	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	20	69.2	+ 0.7	85	8	47	3	28	5.08	+1.53	1.29	0	16	7	8	16	nw.	Geo. T. Argabate.
Logan	Logan	687	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. C. Flanagan.
Madison	Boone	704	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	21	64.0	− 3.4	80	30	44	4	28	8.90	+4.50	3.14	0	22	0	23	8	sw.	S. L. Brown.
Miller	Fayette	.....	0	.....	.....	.....	.....	.....	.....	.....	3.89	.....	0.93	0	9	.....	.....	.....	.....	J. R. Bays.
Point Pleasant	Mason	553	27	73.6	− 1.0	91	5†	47	2†	37	2.78	−0.35	1.08	0	12	8	10	13	.....	W. D. Holmes.
Powellton	Fayette	933	24	72.1	− 0.8	91[b]	1†	48[c]	3	39[c]	1.81	−2.50	0.55	0	11	12[b]	17[b]	0[b]	.....	Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	4	.....	.....	.....	.....	.....	.....	.....	2.93	.....	0.79	0	14	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	4	.....	.....	.....	.....	.....	.....	.....	4.18	.....	0.75	0	9	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	20	73.3	− 1.2	93	5	47	3†	46	2.89	−0.38	0.82	0	10	7	5	19	s.	E. C. Brace, Jr.
Ryan	Roane	709	17	71.8	− 0.5	90	7†	43	3	37	2.97	−0.94	0.61	0	16	11	9	11	.....	Wm. E. Ryan.
Sharples	Kanawha	.....	0	.....	.....	.....	.....	.....	.....	.....	3.04	.....	1.50	0	10	.....	.....	.....	.....	C. E. Rippetoe.
Spencer	Roane	784	16	73.3	+ 0.7	94	8	46	3	40	3.46	−0.10	0.82	0	11	7	15	9	.....	A. M. McKown.
Sutton	Braxton	839	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lawrence Freeman.
Union	Monroe	2,250	16	70.5	− 0.1	88	16	48	3	38	5.10	+1.39	1.00	0	18	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	10	70.4[a]	.....	89[a]	29	45	3	35[a]	3.63	.....	0.85	0	16	15	14	2	sw.	J. M. Ayres.
Williamson	Mingo	660	20	72.0	− 3.0	85	8	53	3	27	3.34	−0.21	0.56	0	15	12	10	9	w.	J. F. Keyser.
Averages and	extremes	.....	....	71.2	− 1.2	94	8	42	3	46	3.86	+0.36	3.14	0	12	8	9	14	s.	
State averages and	extremes	.....	....	71.1	− 0.6	95	8†	42	3	46	4.27	+0.42	3.47	0	14	9	10	12	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for August, 1920.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac																																
Brandywine	....do									T.	.65	T.		.30	.45	.12	.70	.05		*	1.95	.85	.10						.70	T.	.10		5.97
Burlington	....do	.55				.10		.85			.70		1.48	T.	T	T.	T.	1.13		.40	.08	.45						1.07		.19			7.00
Harpers Ferry |||	....do		.20				.12					.45		2.30	.05		.05	.22	.41	.10	.11	.40						.38		.20		4.99
Martinsburg	....do	.27					.23	T.			.15		.14				.10	.55		1.38	.46								.40				3.68
Moorefield	....do	.55						.20		.03	.13		.83	.15	.15	.21	.25	.03	.06	.70	.62	.03	1.10						.82		.65		6.51
Piedmont	....do	.02				*	*	*	*	*	*	*	*	*	4.17	.03		.02		.90	.32	.07	.05						.92		.26	.06	6.82
Romney	....do	.43					.05	.27	.29		.04		.05	.20		.25	.45	1.50	.10	*	.56	*	.55					*	1.07	.05			5.86
Upper Tract	....do						.25				.38		.10	T.	.50	.70	.90	.40	T.	1.70	.90	.47	.50	.10	T.							.10	7.00
Wardensville	...do																																
Northern Division.																																	
Bens Run	Ohio								.95	.65	.34		.59	.13		.17							.30					.03					3.16
Brandonville |||	Monongahela																															
Buckhannon	....do	.33					T.	.72		.25	.25			T.	T.	T.	T.			T.	.60		.90					T.				.25	3.30
Cairo		T.							02	1.17	.94	.08	.20	.02		.09	.02			.24			.05					.08		.08			2.99
Cortland |||	Monongahela	.85				.42	.11				.21		.85			.11	.31	.67	.11	.74			.23					.52		.13			5.26
Creston |||	Little Kanawha	.04								T.	1.16	.52	T.	.10	T.	.10	T.	.07			.64		.80						.25		.20		3.88
Davis |||	Monongahela	.20	.45				.08	.28		.06	.17			.95		.17	.22	.10	.26	T.	.30	.02	.09	.23					.29			.09	3.96
Elizabeth	Little Kanawha	.09									1.74	.62	.05	.12	.05						1.00		.55						.60	.02			4.84
Elkins ***	Monongahela	.16				T.	.58	.32		.11	.31	T.	.17	.48	T.	.10	.07	.02	.01	.19	.12	T.	.44	T.				.12	.01	T.	.03	.09	3.33
Fairmont |||	....do	.37	.06				.02	T.		T.	.41	.10		.63	T.	.02	.30			T	1.45	1.80	1.67	.01					T.	.62	.02		7.48
Glenville |||	Little Kanawha	.12	.05					.06		.60	.24	.15				.12		T.	.42			.18	.40					T.			.10		2.45
Grafton	Monongahela	T.					.04				.63	.03	T.	.52				*	*		*	.22	*	*	1.12				*	.13	.13	T.	2.82
Lost Creek	....do	.48					T.	.28	.08	.30	.10		T.	T.		T.					.06	.20		.06									1.69
Mannington	....do	.16					.04	.36	.06	1.22	.34	.22	.35	.15	.02	.01	.13			.25	.09	.37	.30					T.	.16	.18	.14		4.55
Morgantown	....do	.85					.41			1.60	.14	.20	1.70	.06		.37	.11					.73	.50						.04				6.71
Moundsville	Ohio								.27	.98	.47		.07								.18									T.		.10	2.07
New Cumberland	....do								.57	.17	.17	.33		.17		.09	.15						.05						.43	.22		.76	3.11
New Martinsville	....do								.55	.65	.75		1.00							.05			.80								.30	.20	4.30
Parkersburg ***	Ohio							.05	.14	.40	.65	.09	.05	T.	T.	.14				1.08		T.	.04					T.		.01			2.65
Parsons	Monongahela						T.					.55	.45	.42	.15	.18		T.		.30		T.											2.05
Philippi	....do	.93					.08	.19		.05	.08	T.	T.	.13		T.	.10	T.		.42	T.		.13					T.	T.	T.	.21		2.32
Pickens	....do	.25					.10	1.90		.10	1.38	T.	.38	1.10		.28	.19	.38	.42	.18		T.	.97	.20				.10	.15		.34		8.42
Rowlesburg |||	....do	.42	.12				.07	.21		.27	.26	.22		1.10		.06	.31				.26		.80	.06					.24	.05	.26		4.71
Saint Marys |||	Ohio	.23							.58	T.	.63	.73			.04		.25				.05		.18							T.			2.69
Smithfield |||	Fishing Creek		.02				.02		.05	.22	.88	.26		.28	.03	.01	.19			.06		.45	.52								.05		3.04
Stony River Dam|||	Monongahela	.07	.25				.13	.09	.70		.03	.19		.95			2.14	.16	.89	.04	1.66	.13	.10	.04				1.29	.02	.35	.05	9.28
Terra Alta	....do	.24					.08	1.80		.05	.40	.20	1.05	1.00	.04	.17	.02	T.		.07	.15	.25	.52						.30	.02	.20		6.56
Wellsburg	Ohio	.60							1.95	.43	.60	T.	.15	.12	.36	.04	.28		T.	.03	.03	.10	.17						.08		.09	.40	5.43
Weston	Monongahela	.17					.02	1.14		.25	.35	.06		.41	T.					.03			.47								.25	.09	3.24
Wheeling |||	Ohio	.15					T.		.37	.17	.55	.24		.40	T.	.45	.24		.04		.05	T.	.05	.05						.02	.20	2.98
Southern Division.																																	
Bancroft |||	Great Kanawha	.49	.03					.40	.03	.26	.37	.30	.04				.30	.01		.07	.98		.03								.08		3.39
Beckley	....do						1.03			.37			T.	T.	.18	.17			.33	T.			.24				.14		.63				3.09
Bluefield	....do	.74				.15	.47	.03	.10	.15	.18	.01	.35	.01	1.10	.30		.55	.50	1.75	.48	.38	.15	.10				.60	.15	.14			8.39
Camden-on-Gauley |||	....do	.80									.10			1.00					.72	1.60		.22	.10								1.00	5.54
Charleston |||	....do	.25	.10					T.		.68	.30	T.	.20	.25	T.		T.			T.	.92		.28				.10			.25		3.33
Clay |||	....do	T.									.36	1.46		.01			.10				.03	.04										2.00
Cuba	Sand Creek									.55	.56		.15	T.		T.	T.			.10			.30				T.		.10			1.76
Dam 19 O. R. |||	Ohio	.25							.11	.11	.38	.85	T.	.10		.12	.08				.28		.02	T.							.07		2.37
Dam 20 O. R. |||	....do	.52							.19	.24	.65	1.58	.23	T.			.05				.25		.47	T.									4.18
Dam 22 O. R. |||	....do	.50							.25	.30	.44	.32			.05		.10				.12		.25										2.33
Dam 26 O. R. |||	....do	.58							1.25	.08	.85	.50		.10			.08				.15												3.59
Evans	Ohio								.88	.83	.94					.32				.20			.25						.11		T.		3.53
Gary ||||	Big Sandy	.04	.99		.02		.21	.37	.14	.42	.62	.20		.18	.11	.45	.35		.19	.10	1.32		.14	.10				.31		.03			6.29
Green Sulpr. Spgs.	....do																																
Hinton |||	....do	T.	.74				.08	.04	T.		.16	.76	.10	.04	.38	.46	1.50	.02	.42	.10	.16	.90	.06	.36				.24	.04		.02		6.58
Holcomb	....do	.42						.08		.52	.31		.11	.36	.21	.05	.07	.05	.02	.08	1.75	.06	.12	.05						.27	.11		4.64
Huntington ||||	Ohio	.32	T.					.06		.70	.26	.10	.52	.02	T.		.58				.04						T.	.02		.24		2.96
Kanawha Falls||||	Great Kanawha	.57								.50	.22	.73															T.			.55		2.57
Kaytord|||	....do	.10	.32				.08	T.		.45	.28	.26	.03	T.	.11		.23			.88	.03		.07	.14						.14		3.12
Lewisburg	....do	.19				T.	.44	.11		.36	.81	.20		.33	.31	.07	.08	T.	.13	.61	T.		.06					.09		.14	1.15		5.08
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	....do	.12				T.	.06	.72		.16	.18	.10	1.86	1.28	.12	.03	.44	.06	.15	1.02	1.56	.04	.16					.12	.18	.20	.10	.24	8.90
Miller |||	Meadow										.54				.12		.40	.30		.98			.09			.08			.41	.97		3.89
Point Pleasant	Ohio	.10							.44	.44	.24		.05				.04	.02			.18		.02					.13		.04		1.08	2.78
Powellton	Great Kanawha	.17							.04	.55	.43	.02		.10		.09			.11	.02	.13				.15								1.81
Raleigh |||	....do		.79					.08	.08	.04	.18	.10			.20		.53	.03		.25	.35	.10					.07		.13			2.93
Renick |||	....do							.50				.70			.75		.35		.33	.40	.10	.45								.60		4.18
Robertsburg |||	....do	.29							.82	.10	.55	.13		.35			.13				.40		.05							.07			2.89
Ryan	....do	.02							.05	.36	.03		.04	.36	.01	.16	.02			.51	.61	.15	.25					.33		.03		.04	2.97
Sharples |||	Coal River						.02			.02	.55	.10	.05	.03								.50				.02		1.50			.25	3.04
Spencer |||	Little Kanawha	.25								T.	.47		.05	.15	.28	T.	.22	.28			.82	.06	.48								.40	3.46
Sutton	Great Kanawha																																
Union	....do	.40					.10	.11	.35	.24	.15	.05	.53	.26	.21	1.09	.10	.25	.45	.15			.10					.25		.40			5.10
White Sulphur Spgs.	....do	.20				.15	.05	.05	.05	.60	.85	.20		.25	.15	.30		.10	.20	.18								.20			.10		3.63
Williamson |||	Big Sandy	.05	.18		T.			.22		.56	.45	T	.10	.30	.02	.20		.24		T.	.56		.30	.02				.10			.04		3.34

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight.

||| Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

Daily Temperatures for August, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Brandywine	Maximum	85	82	79	84	85	86	87	85	86	89	88	82	88	84	87	86	85	84	78	72	80	80	70	75	80	77	75	70	84	85	84	82.0
	Minimum	58	55	54	60	62	59	61	60	59	52	57	60	63	62	63	62	64	53	62	60	60	63	60	56	54	58	52	58	54	58	60	59.0
Burlington	Maximum	75	70	76	78	81	84	85	85	83	82	84	82	82	83	85	84	84	83	73	76	74	76	78	77	78	75	73	65	78	84	83	79.2
	Minimum	53	55	46	46	48	66	62	61	63	68	64	61	66	64	64	67	65	68	67	66	53	58	59	60	62	61	65	59	61	63	61	60.7
Martinsburg§	Maximum	77	74	80	84	84	88	89	93	86	86	86	92	90	88	88	87	88	88	73	69	80	80	73	72	80	82	78	64	77	89	88	82.4
	Minimum	68	55	50	50	54	65	68	64	66	71	68	65	68	72	70	72	69	68	68	61	62	65	60	63	61	58	59	59	59	64	64	63.4
Moorfield	Maximum	85	75	80	84	85	90	93	95	88	85	88	89	91	91	93	87	90	88	80	72	81	83	73	77	84	83	78	82	88	90	88	85.0
	Minimum	69	62	54	56	58	71	68	67	69	70	69	69	71	72	69	73	70	71	69	67	67	67	65	63	63	67	58	67	63	68	66	66.4
Piedmont	Maximum	75	70	76	80	..	..	..	..	..	..	..	..	..	..	87	84	86	84	72	72	77	78	71	76	78	77	73	67	79	86	83	77.7
	Minimum	63	54	47	50	..	..	..	..	..	..	..	..	..	..	65	66	64	64	66	61	62	62	65	55	57	60	53	58	60	63	62	59.9
Romney	Maximum	81	74	81	83	86	90	91	92	86	87	89	88	88	88	89	90	90	89	84	76	83	77	74	78	81	81	76	72	78	74	75	82.9
	Minimum	63	53	45	46	48	61	62	61	62	62	63	62	61	65	71	65	66	62	61	66	63	60	60	57	56	57	51	58	61	58	58	59.5
Upper Tract	Maximum	83	70	80	81	81	80	82	90	80	75	85	86	84	75	86	83	83	83	82	81	81	80	77	79	81	81	82	83	84	..	84	81.4
	Minimum	50	49	44	47	47	46	55	58	68	63	61	61	62	62	61	60	61	61	60	61	60	60	60	57	55	55	56	55	55	..	56	56.9
Wardensville	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Northern Division.																																	
Bens Run	Maximum	79	73	83	89	91	88	89	91	76	77	84	84	84	85	84	83	83	87	80	89	88	78	74	76	81	85	77	85	84	87	81	83.1
	Minimum	62	51	52	56	61	64	65	65	67	65	66	67	66	67	67	70	67	61	64	67	70	64	59	56	57	58	65	60	61	67	67	63.0
Buckhannon	Maximum	70	68	75	80	82	80	80	85	72	76	80	81	82	82	83	80	82	83	80	80	85	74	65	72	76	81	74	80	81	83	79	78.4
	Minimum	61	55	50	53	53	67	62	64	66	66	62	65	66	64	65	66	60	60	60	63	64	61	57	57	55	54	61	57	62	68	67	61.0
Cairo	Maximum	76	71	76	85	88	87	87	90	79	76	80	82	82	83	81	83	83	85	85	85	87	78	70	80	80	85	75	82	84	86	82	81.7
	Minimum	62	50	47	52	55	65	61	66	66	65	63	65	63	64	65	68	66	63	66	66	64	64	57	52	58	53	62	56	57	65	62	60.9
Creston	Maximum	76	76	85	91	90	89	90	93	81	79	82	88	85	88	87	86	85	88	90	88	90	82	73	79	80	89	80	82	85	89	85	84.9
	Minimum	62	50	46	56	57	65	63	66	67	65	63	68	64	61	66	70	68	62	60	66	65	66	59	55	60	54	64	56	59	67	65	61.8
Elkins	Maximum	68	63	76	80	82	80	80	85	79	75	80	78	79	80	82	80	79	82	77	78	84	70	62	71	75	80	70	76	82	81	78	77.2
	Minimum	54	49	46	48	49	63	62	60	62	61	62	65	65	65	65	64	62	63	65	63	60	56	55	56	56	55	58	59	56	64	64	59.0
Fairmont§	Maximum	77	73	84	89	90	90	87	93	84	78	86	85	87	86	86	86	86	90	84	89	91	67	74	80	82	88	78	85	87	88	82	84.3
	Minimum	63	54	52	54	56	66	65	66	68	68	64	66	65	64	68	67	67	62	67	66	63	67	57	56	57	59	61	60	59	65	64	62.5
Glenville	Maximum	81	78	86	92	94	93	91	95	95	92	88	89	87	87	88	87	87	91	90	90	92	91	72	90	83	92	90	88	87	91	91	88.6
	Minimum	62	52	48	56	56	67	63	64	66	65	62	68	66	66	67	68	66	61	66	65	65	64	58	55	57	57	60	55	60	66	64	61.8
Grafton	Maximum	74	77	85	88	85	89	88	92	85	79	84	88	86	87	88	88	81	81	81	91	71	71	79	82	88	79	81	84	88	..	83.4
	Minimum	61	53	49	53	54	66	64	64	66	68	61	64	65	65	67	67	66	60	67	65	63	69	57	55	56	57	60	58	57	65	65	61.5
Lost Creek	Maximum	74	70	79	84	87	87	35	88	90	75	84	86	84	85	86	83	85	88	80	85	90	74	71	76	81	85	75	85	87	88	83	82.6
	Minimum	60	51	45	51	52	66	62	63	66	66	62	59	65	62	64	65	65	56	66	66	64	61	56	53	53	53	62	55	54	63	67	59.8
Mannington	Maximum	72	68	76	81	82	82	82	85	80	77	80	78	81	81	82	82	80	82	79	79	82	76	71	73	77	80	72	78	81	83	79	78.7
	Minimum	60	50	47	52	54	64	61	65	65	67	63	63	63	63	66	67	66	61	67	64	62	62	58	54	57	55	50	58	58	64	61	60.5
Morgantown	Maximum	74	68	80	84	81	87	83	91	82	77	79	79	83	84	85	84	86	87	78	82	86	80	73	78	80	82	75	..	84	88	82	81.4
	Minimum	56	51	48	60	60	65	64	66	68	66	62	63	66	66	68	67	67	61	68	66	65	60	58	56	53	57	69	..	65	66	66	62.4
New Cumberland	Maximum	72	67	76	83	87	84	88	86	86	76	85	79	82	83	85	83	82	83	83	81	87	67	74	77	81	79	68	82	84	86	82	80.6
	Minimum	60	56	49	53	55	58	60	56	67	68	62	63	65	66	63	70	64	66	66	65	62	52	58	52	53	55	56	62	57	60	61	60.0
New Martinsville	Maximum	70	70	78	83	84	84	86	84	82	80	80	79	83	82	91	82	82	88	88	89	90	83	70	80	80	82	76	80	82	82	78	81.5
	Minimum	62	51	53	57	58	62	66	66	66	66	66	64	66	68	70	62	64	68	68	66	63	58	54	59	58	63	60	60	66	64	62.6
Parkersburg	Maximum	74	70	78	85	86	85	87	88	75	79	80	84	85	85	82	85	84	83	79	84	88	73	72	77	80	83	75	84	84	88	84	81.5
	Minimum	60	52	52	60	63	67	66	67	69	66	66	67	67	69	70	71	68	65	67	68	69	61	59	57	59	56	66	62	64	72	67	64.3
Parsons	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Philippi	Maximum	70	67	79	83	85	89	81	89	83	77	80	84	82	82	85	82	82	87	80	83	86	79	67	75	79	85	74	89	84	84	81	81.1
	Minimum	58	52	47	55	59	65	61	68	67	65	61	63	66	65	65	68	65	58	65	64	65	58	55	56	54	54	63	58	60	63	65	60.9
Pickens	Maximum	67	68	69	83	84	79	81	86	82	83	84	80	83	79	84	78	82	82	75	80	85	70	58	70	76	83	71	78	83	81	81	78.3
	Minimum	55	48	43	49	48	61	58	58	61	58	57	48	61	61	60	60	60	55	60	50	58	56	52	50	51	56	51	53	55	62	54	55.1
Terra Alta	Maximum	66	62	78	78	78	82	78	84	82	72	78	77	80	79	81	79	80	83	76	70	80	74	65	69	75	76	70	69	82	80	75	76.1
	Minimum	57	48	44	48	46	62	57	55	58	65	56	56	61	62	60	64	60	54	64	58	59	58	54	50	51	54	54	54	51	62	63	56.3
Wellsburg	Maximum	75	68	78	87	89	84	90	90	78	78	84	78	84	86	84	84	86	83	84	83	88	78	75	76	82	81	77	80	80	84	82	81.8
	Minimum	59	46	47	49	55	56	60	64	66	66	64	61	64	65	65	68	64	65	64	65	62	61	57	49	56	54	57	64	61	64	59	59.9
Weston	Maximum	72	70	81	84	85	85	83	87	82	76	82	84	83	83	83	84	83	86	78	85	89	77	68	75	81	86	74	82	83	86	83	81.3
	Minimum	62	54	48	54	54	67	63	64	67	66	62	66	67	66	65	69	68	60	68	66	64	62	58	56	55	57	62	57	58	67	67	61.9
Wheeling§	Maximum	82	75	83	89	92	90	92	93	77	79	92	79	87	88	89	86	88	86	84	87	92	71	80	80	87	87	79	82	88	93	88	85.3
	Minimum	63	47	51	53	58	61	64	66	67	69	66	65	65	68	69	70	60	62	66	67	65	65	60	52	54	55	56	62	60	65	60	61.6
Southern Division.																																	
Beckley	Maximum	82	81	83	83	82	80	83	81	84	83	83	84	86	83	82	82	81	80	81	82	85	84	70	80	79	81	82	84	84	85	86	82.1
	Minimum	60	53	52	51	50	60	60	65	64	59	62	62	65	64	73	62	63	62	62	62	55	50	57	49	54	60	54	53	54	60	60	58.6
Bluefield	Maximum	82	76	74	76	73	74	78	76	78	79	78	78	78	80	75	74	76	78	80	80	81	78	70	66	75	74	72	73	73	80	79	76.3
	Minimum	58	56	48	56	57	62	62	60	65	63	64	64	63	66	63	62	61	62	61	56	65	64	56	54	50	57	59	57	59	62	64	59.9
Charleston	Maximum	92	89	88	85	87	90	92	90	88	85	88	83	85	91	90	89	90	93	92	88	87	89	74	77	80	82	89	85	81	86	89	86.9
	Minimum	59	55	52	54	55	65	66	66	68	60	62	60	59	61	67	69	69	64	62	62	61	59	60	57	60	60	61	55	62	60	62	61.1
Gary§	Maximum	80	73	87	89	78	79	86	87	83	84	85	84	86	78	79	87	81	81	83	88	86	75	66	72	81	85	72	82	83	84	85	81.6
	Minimum	63	58	50	55	55	59	62	60	65	66	66	66	65	66	65	67	66	66	66	61	64	67	60	57	55	56	58	54	59	65	63	61.5
Green Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Hinton§	Maximum	78	70	76	80	74	79	83	84	81	78	86	83	83	76	78	79	81	82	80	74	83	74	68	77	77	80	68	80	82	84	84	78.8
	Minimum	59	58	50	52	55	57	65	63	63	66	65	66	65	65	66	65	66	66	65	64	65	66	60	59	59	58	60	57	57	63	64	61.6
Holcomb	Maximum	72	69	77	83	82	81	83	86	81	78	86	83	83	80	82	80	81	84	81	83	86	77	62	74	77	83	77	80	83	83	82	80.0
	Minimum	58	52	42	49	48	57	58	57	64	61	59	60	61	63	60	63	59	59	58	59	58	60	56	56	53	52	53	54	54	62	59	56.9
Huntington§	Maximum	80	78	85	90	92	87	91	88	77	83	87	85	85	87	86	86	87	84	85	87	89	70	74	78	82	87	82	85	83	88	88	84.4
	Minimum	66	54	53	56	63	67	66	66	69	67	68	70	68	70	70	72	68	65	67	70	70	70	70	68	62	57	59	61	61	66	62	65.2
Lewisburg	Maximum	75	69	74	77	75	77	79	85	79	78	81	81	83	75	83	80	81	83	75	78	83	78	70	77	79	81	70	78	83	84	83	78.5
	Minimum	61	49	47	50	50	62	63	57	64	63	61	64	63	65	63	66	63	64	64	64	61	66	59	58	54	54	60	58	57	63	60	59.8
Marlinton	Maximum	72	68	70	72	74	74	72	76	74	72	74	78	76	74	78	76	74	76	72	68	76	70	68	70	72	74	64	68	74	80	76	73.0
	Minimum	52	48	48	44	48	50	52	56	54	56	60	62	58	61	60	58	58	56	60	58	58	62	54	50	52	54	52	54	56	60	58	55.1
Point Pleasant	Maximum	78	75	81	90	91	91	90	89	77	81	84	85	86	91	85	84	88	87	83	88	91	75	73	81	83	88	79	88	85	91	90	84.8
	Minimum	64	47	47	54	62	64	64	64	67	66	65	67	67	70	70	70	75	63	67	65	67	64	55	55	57	51	60	58	60	68	66	62.5
Powellton	Maximum	91	77	83	88	88	84	91	91	86	80	88	86	86	86	84	83	84	88	86	85	88	..	80	..	81	89	75	74	89	87	87	85.0
	Minimum	52	54	48	58	57	67	62	54	66	64	65	77	64	68	56	55	57	62	61	57	65	..	51	..	52	51	57	58	..	..	..	59.2
Robertsburg§	Maximum	87	75	85	89	93	89	91	91	75	85	85	85	85	87	89	86	85	84	87	90	90	70	73	79	83	76	86	84	89	89	86	84.8
	Minimum	65	49	47	54	47	67	62	65	68	65	65	67	68	67	69	67	64	66	66	68	66	59	56	54	54	56	56	67	66	60	61.8
Ryan	Maximum	81	74	80	86	86	86	90	90	84	80	84	86	81	86	83	83	85	85	83	83	87	81	68	77	80	88	78	82	83	87	84	83.0
	Minimum	59	49	43	54	55	64	60	64	65	62	62	61	62	63	64	68	64	61	67	62	64	63	59	53	57	62	63	57	57	67	64	60.5
Spencer §	Maximum	76	74	84	89	90	90	90	94	81	80	85	87	82	87	87	86	87	87	84	85	90	88	88	80	81	89	*88	87	89	91	80	85.7
	Minimum	61	52	46	50	50	58	60	64	68	62	60	67	65	67	68	70	68	62	65	64	65	64	60	60	56	54	56	60	61	64	60	60.9
Union	Maximum	86	84	86	83	84	86	87	86	81	82	83	82	83	86	87	88	85	84	86	85	85	82	80	76	81	81	80	79	85	86	85	83.7
	Minimum	53	50	48	50	51	52	58	53	63	64	64	60	59	60	61	62	61	60	59	59	61	58	57	57	52	55	59	56	58	57	60	57.3
White Sulphur Spgs.	Maximum	75	77	80	75	78	80	87	82	79	85	85	85	86	85	85	86	80	75	82	87	80	73	80	82	81	66	82	85	89	85	..	81.2
	Minimum	54	46	45	50	57	62	58	68	67	62	64	62	65	62	65	62	64	62	56	66	66	60	58	54	55	59	60	56	59	62	61	59.6
Williamson§	Maximum	77	72	80	82	83	82	83	85	78	78	82	81	79	79	80	80	80	81	82	82	83	71	78	72	79	80	74	78	79	82	81	79.5
	Minimum	66	55	53	57	62	64	65	64	68	68	68	72	69	70	68	70	70	68	69	62	67	70	58	60	59	58	63	58	60	69	68	64.5

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, August, 1920.



U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY

FEB 2 1921

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

SEPTEMBER, 1920

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JANUARY 7, 1921

Departure of the Mean Temperature from the Normal, September, 1920.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVIII. PARKERSBURG, W. VA., SEPTEMBER, 1920. No. 9.

GENERAL SUMMARY.

September was somewhat warmer and wetter than usual and free from abnormally cool and wet periods. The precipitation was well distributed over the State and throughout the month. Showers were frequent during the second and last decades but the weather was exceptionally pleasant from the 16th to the 23d, when corn ripened rapidly There were scattered light frosts in the central and northern counties but practically no damage resulted and growth continued until the close of the month, when the corn crop was safe A large yield of potatoes of excellent quality was also mostly dug. The peach crop was good and apples were plentiful. The month was considered especially favorable for all crops and activities.

PRESSURE.

The mean sea-level pressure at Parkersburg and Elkins was 30.05 inches. The highest and lowest readings observed were as follows: Parkersburg, 30.26 inches on the 22d, and 29.75 inches on the 30th. Elkins, 30.27 inches on the 22d, and 29.64 inches on the 30th.

TEMPERATURE.

The monthly mean for the State, determined from 48 stations, was 66.7°. The departure from the normal for 41 stations having ten or more years of record was +1.0°. The temperature was somewhat below the normal from the 2d to the 9th, 17th to the 19th, and on the 30th, and light frosts occurred in a few of the more elevated localities on the 2d, 3d, 18th, and 19th. From the 10th to the 15th and the 20th to the 29th the temperature was generally considerably above the normal, with the highest readings occurring from the 21st to the 27th.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 85 per cent; 8 p. m., 74 per cent. The September averages for the same hours for the past 31 years are 84 and 71 per cent, respectively. Elkins, 8 a. m., 93 per cent; 8 p. m., 81 per cent. The September averages for Elkins for the same hours for the past 19 years are 92 and 83 per cent. respectively.

PRECIPITATION.

The average precipitation for the State, determined from 66 stations, was 3.14 inches. The departure from the normal for 43 stations having ten or more years of record was +0.41 inch. While all districts received nearly the same rainfall the amounts were generally greatest over the west-central and eastern counties. General rain occurred on the 5-6th, 10th, 12th, 16th, 24-25th, 27-28th, and 30th, the amounts received being moderately heavy on the 10th, 28th, and 30th. Scattered light showers also fell on the 7th, 11th, 13th, 25th, and 26th.

WIND.

The average wind velocity at Parkersburg was 4.0 miles per hour, or 0.3 mile below the September average for 30 years. The average at Elkins was 3.2 miles per hour, or 0.4 mile above the September average for 21 years. The highest velocity at Parkersburg was 20 miles per hour from the southwest on the 24th, and at Elkins 16 miles per hour from the southwest on the 11th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 68 per cent of the possible amount, or 10 per cent above the September average for 23 years. The average at Elkins was 59 per cent, or 6 per cent above the September average for 21 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 6th, 7th, 8th, 16th, 17th, 18th, and 19th; Bluefield, 15th, 17th, 18th, 19th, 21st, and 26th; Burlington, 25th and 29th; Creston, 2d, 6th, 7th, 8th, 9th, 11th, 15th, 17th, 18th, 22d, 27th, and 29th; Elkins, 2d, 3d, 4th, 8th, 14th, 15th, 17th, 18th, 20th, 21st, 22d, 27th, and 29th; Evans, 21st; Fairmont, 15th; Grafton, 11th, and 18th; Hinton, 7th. 11th, 17th, 25th, and 27th; Huntington, 7th and 18th; Mannington, 2d, 3d, 7th, 8th, 14th, 15th, 17th, 18th, 20th, 21st, 22d, 26th, 27th, and 29th; New Cumberland, 14th and 15th; Romney, 15th; Smithfield, 16th, 17th, 22d, and 23d; Stony River Dam, 4th, 21st, and 22d; Weston, 8th, 11th, 14th, 15th, 17th, and 18th; Wheeling, 4th, 5th, 8th, 11th, 14th, 15th, 17th, 18th, 25th, and 26th.

Frost, light: Davis, 2d, 17th, and 18th; Holcomb, 19th; Pickens, 18th; Terra Alta, 3d and 20th.

Halos, lunar: Wheeling, 23d, 24th, and 26th.

Halo, solar: Elkins, 4th.

Thunderstorms (dates and number of stations reporting): 6th, 1; 8th, 1; 9th, 7; 10th, 4; 11th, 5; 12th, 3; 13th, 1; 15th, 1; 16th, 1; 24th, 2; 25th, 3; 26th, 8; 27th, 12; 28th, 4.

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	66.8	..	..	1.66	....	....	....	..	..	..
1892	64.4	92	32	2.57	....	....	...	..	..	..
1893	65.0	91	29	2.28	4.50	1.05	....	..	..	..
1894	67.8	98	31	2.50	4.75	1.25	....	12	11	7
1895	70.3	107	29	1.70	4.25	0.42	....	17	8	5
1896	65.2	95	22	4.59	9.04	1.58	....	14	9	7
1897	66.4	103	27	1.14	4.00	0.02	....	22	6	2
1898	67.6	97	33	2.42	4.75	0.80	....	16	10	4
1899	64.0	100	26	3.65	6.35	1.65	....	14	9	7
1900	71.1	100	35	1.92	5.50	0.34	....	14	10	6
1901	64.8	95	27	3.35	7.64	1.46	....	13	8	9
1902	64.8	98	25	2.98	4.81	1.23	....	12	9	9
1903	64.7	97	25	1.30	2.78	0.10	....	21	6	3
1904	67.0	95	25	1.76	4.55	0.53	....	16	10	4
1905	65.6	97	29	2.21	4.21	0.54	....	18	8	4
1906	69.9	97	38	3.25	5.44	0.57	....	12	10	8
1907	66.3	93	30	4.41	7.10	2.00	....	12	10	8
1908	65.9	99	24	0.95	2.54	0.26	....	21	6	3
1909	63.7	95	28	2.74	8.75	0.63	....	15	9	6
1910	68.4	97	32	3.50	6.04	0.50	....	12	11	7
1911	68.8	100	32	4.67	8.30	1.80	....	12	11	7
1912	68.6	98	30	3.85	9.18	1.13	....	17	7	6
1913	64.2	100	25	2.88	6.38	0.86	....	14	7	9
1914	63.2	97	24	1.58	5.65	0.17	....	18	6	6
1915	67.6	100	31	3.84	7.18	2.00	....	16	8	6
1916	63.0	99	27	3.71	7.88	1.01	....	18	6	6
1917	62.4	98	23	2.79	6.62	1.16	T.	17	7	6
1918	60.5	93	24	2.92	4.73	1.37	T.	15	7	8
1919	66.0	98	31	2.11	4.37	0.12	....	18	7	5
1920	66.7	96	34	3.14	5.38	1.34	....	16	7	7
Means and extremes ..	66.0	107	22	2.75	9.18	0.02	T.	16	8	6

Climatological Data for September, 1920.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	4	64.6	.....	85	11†	37	18	41	1.90	.....	0.50	0	8	19	4	7	n.	Elmer Keister.
Burlington	Mineral	875	26	63.7	− 0.6	83	25†	41	18	36	4.76	+1.70	2.03	0	6	17	9	4	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	31	.....	.....	.....	.....	.....	.....	.....	3.69	+0.91	2.00	0	5	.....	.....	.....	e.	S. W. Lightner.
Martinsburg	Berkeley	435	28	66.0	− 0.1	87	26	43	20†	37	3.45	+0.59	1.84	0	6	21	4	5	n.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	24	69.5	+ 2.9	89	26	51	4	28	2.31	−0.21	1.07	0	5	25	2	3	.....	M. S. Henkel.
Piedmont	Mineral	919	7	64.8	.....	88	26	44	4†	37	2.49	.....	0.92	0	9	19	8	3	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	22	64.0	− 2.2	84	25	41	3†	36	3.25	+0.82	1.05	0	5	14	9	7	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	21	64.6[b]	− 0.9	85[b]	12	40[b]	17	42[b]	2.65	+0.34	1.00	0	4	20[c]	3[c]	4[c]	w.	J. M. Mallow.
Wardensville	Hardy	1,200	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Luther F. Sutton.
Averages and	extremes	.....	....	65.3	− 0.2	89	26	37	18	42	3.06	+0.69	2.03	0	6	19	6	5	w.	
Northern Division.																				
Bens Run	Pleasants	622	18	69.2	+ 2.6	91	26	46	3	37	3.26	+0.95	1.36	0	9	22	4	4	.....	J. D. Riggs.
Bruceton Mills	Preston	1,549	0	.....	.....	.....	.....	.....	.....	.....	2.59	.....	1.35	0	5	.....	.....	.....	.....	W. M. Wolf.
Buckhannon	Upshur	1,411	23	64.8	+ 0.8	83	27	41	23	40	2.87	−0.29	1.20	0	5	25	3	2	.....	H. A. Darnall.
Cairo	Ritchie	680	21	67.6	− 0.4	88	23	42	3	40	.....	.....	.....	0	.....	16	7	5	.....	O. C. Hess.
Cortland	Tucker	3,300	4	.....	.....	.....	.....	.....	.....	.....	2.55	.....	0.78	0	6	15	11	4	.....	Samuel Harmon.
Creston	Wirt	701	18	69.0	+ 1.9	92	27	44	18	39	3.01	+0.45	0.85	0	9	18	4	8	sw.	I. M. Reed.
Davis	Tucker	3,093	11	.....	.....	.....	.....	.....	.....	.....	3.69	.....	1.25	0	6	18	9	3	w.	Ross C. Male.
Elizabeth	Wirt	646	8	.....	.....	.....	.....	.....	.....	.....	2.28	.....	0.70	0	7	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	19	63.4	+ 1.5	83	26	40	18	35	3.35	+0.48	1.43	0	10	10	10	10	nw.	U. S. Weather Bureau.
Fairmont	Marion	883	14	68.2	+ 1.7	92	27	45	3†	42	3.86	+1.30	1.84	0	7	25	1	4	w.	F. P. Hall.
Glenville	Gilmer	738	26	71.0	+ 3.4	96	28	41	19†	50	1.34	−1.99	0.45	0	6	20	8	2	w.	Howard R. Brannon.
Grafton	Taylor	1,000	27	67.6	+ 1.3	93	27	43	3	43	3.22	+0.49	1.00	0	8	11	16	3	n.	W. C. Byers.
Lost Creek	Harrison	1,026	22	66.7	+ 1.9	91	27	40	3†	43	3.84	+0.96	1.90	0	7	22	2	6	w.	Allen Smith.
Mannington	Marion	974	17	64.6	− 0.1	84	27	41	3	36	5.38	+2.35	2.10	0	10	17	7	6	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	27	68.3	+ 1.1	90	27	45	30	35	2.51	−0.56	1.22	0	4	7	9	14	.....	Prof. E. L. Andrews.
Moundsville	Marshall	642	17	67.4	+ 0.5	90	23†	43	3†	42	3.26	−0.21	1.30	0	6	10	15	5	w.	G. W. Wright.
New Cumberland	Hancock	987	22	65.5	+ 3.4	88	25	42	20	38	1.99	−0.56	1.16	0	5	17	7	6	s.	M. F. Smith.
New Martinsville	Wetzel	634	26	69.1	+ 0.8	92	25	46	20	38	4.35	+1.76	2.20	0	6	21	5	4	n.	Wm. Ankrom.
Parkersburg	Wood	638	33	68.8	+ 2.8	89	27	47	30	33	3.69	+0.97	1.53	0	9	14	8	8	se.	U. S. Weather Bureau.
Parsons	Tucker	1,656	20	63.8	+ 1.0	85	20†	41	19	41	3.33	+0.19	1.62	0	3	18	7	5	.....	J. W. Swisher.
Philippi	Barbour	1,149	23	67.3	+ 2.1	89	28	44	3†	36	4.42	+1.26	1.89	0	6	21	3	6	w.	Prof. Vernon E. Wood.
Pickens	Randolph	2,697	17	63.8[c]	+ 2.3	86[c]	27	38[c]	18	41[c]	3.18	+0.80	1.70	0	6	22	4	4	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	33	.....	.....	.....	.....	.....	.....	.....	3.04	+0.03	0.98	0	5	.....	.....	.....	.....	J. F. Pierce.
Saint Marys	Pleasants	577	11	.....	.....	.....	.....	.....	.....	.....	3.91	+1.54	1.98	0	9	.....	.....	.....	w.	Wm. Hughes.
Smithfield	Wetzel	835	14	63.5	− 0.9	85	27	42	3	36	3.84	+0.69	1.85	0	10	19	6	5	sw.	G. M. Whisler.
Stony River Dam	Tucker	.....	0	64.4[a]	.....	80[a]	21†	42	20†	33[a]	3.17	.....	0.90	0	10	7	9	14	w.	A. C. Becker.
Terra Alta	Preston	2,612	19	61.8	− 0.5	87	27	34	30	40	3.13	−0.34	1.24	0	10	20	8	2	w.	Dr. C. O. Gorby.
Wellsburg	Brooke	1,225	19	65.0	+ 0.8	86	23	39	20	40	3.43	+0.65	1.95	0	9	22	4	4	w.	George P. Pfister.
Weston	Lewis	1,026	24	67.8	+ 1.1	89	26†	44	18	39	2.84	−0.06	0.91	0	9	12	14	4	ne.	Weston State Hospital
Wheeling	Ohio	645	33	69.4	+ 3.2	92	22†	44	3†	45	2.32	−0.19	0.50	0	8	18	6	6	sw.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	66.6	+ 1.4	96	28	34	30	50	3.23	+0.44	2.20	0	7	17	7	6	w.	
Southern Division.																				
Alum Creek	Kanawha	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Allen.
Bancroft	Putnam	574	16	68.0	− 0.3	88	21	45	30	34	3.08	+0.31	0.50	0	9	13	3	14	s.	R. E. Dent.
Beckley	Raleigh	2,440	20	64.4[1]	+ 1.0	88[b]	5†	44[1]	17	37[1]	.....	.....	.....	.....	.....	13[b]	9[b]	0[b]	w.	John H. Ewart.
Bluefield	Mercer	2,558	25	65.6	− 0.1	84	27	41	30	35	3.80	+1.20	0.93	0	13	7	18	5	.....	Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	5	.....	.....	.....	.....	.....	.....	.....	3.24	.....	1.00	0	7	12	0	18	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	17	70.9	+ 0.8	92	24	48	30	34	4.88	+1.86	1.00	0	9	11	1	18	w.	C. V. Lewis.
Clay	Clay	706	4	.....	.....	.....	.....	.....	.....	.....	2.55	.....	0.70	0	8	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	18	67.9	+ 1.6	89	27	43	18	40	1.88	−0.30	0.45	0	8	10	18	2	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	4	.....	.....	.....	.....	.....	.....	.....	3.84	.....	1.94	0	10	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	4	.....	.....	.....	.....	.....	.....	.....	3.96	.....	2.00	0	8	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	5	.....	.....	.....	.....	.....	.....	.....	2.71	.....	0.95	0	8	.....	.....	.....	.....	Lockmaster.
Dam 26 O. R.	Mason	505	4	.....	.....	.....	.....	.....	.....	.....	2.31	.....	0.58	0	7	.....	.....	.....	.....	U. S. Engineer Office.
Evans	Jackson	606	8	68.4	.....	86	23	50	3†	31	3.56	.....	1.16	0	7	8	5	17	.....	B. F. Sayre.
Gary	McDowell	1,426	4	68.2	.....	87	21†	47	30	33	2.51	.....	0.60	0	9	10	0	20	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Hinton	..do	1,450	23	67.4	− 1.2	86	27	47	30	33	3.06	−0.30	0.94	0	11	7	1	22	s.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	8	64.4	.....	84	21†	38	18	41	3.29	.....	1.47	0	7	15	5	10	.....	W. C. Williams.
Huntington	Cabell	538	26	70.1	+ 2.0	90	26	47	30	32	2.42	−0.09	1.02	0	10	13	4	13	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	1	.....	.....	.....	.....	.....	.....	.....	3.03	.....	1.00	0	4	.....	.....	.....	.....	J. O. Brown.
Kaylord	Kanawha	1,335	4	.....	.....	.....	.....	.....	.....	.....	4.05	.....	1.30	0	11	.....	.....	.....	.....	Cabin Creek Con.Coal Co.
Lewisburg	Greenbrier	2,200	20	65.0	− 1.0	84	27	38	18	41	3.30	+0.46	1.12	0	8	14	9	7	nw.	Geo. T. Argabate.
Logan	Logan	687	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. C. Flanagan.
Madison	Boone	704	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. L. Brown.
Miller	Fayette	.....	0	.....	.....	.....	.....	.....	.....	.....	4.41	.....	1.06	0	7	.....	.....	.....	.....	J. R. Bays.
Point Pleasant	Mason	553	27	70.6	+ 1.5	95	21	45	3	40	2.29	−0.04	0.85	0	7	12	6	12	.....	W. D. Holmes.
Powellton	Fayette	933	24	.....	.....	89[g]	25	.....	.....	.....	2.39	−0.41	0.78	0	6	12[g]	6[g]	5[g]	.....	Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	4	.....	.....	.....	.....	.....	.....	.....	2.98	.....	1.14	0	8	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	4	.....	.....	.....	.....	.....	.....	.....	2.82	.....	1.10	0	5	.....	.....	.....	nw.	Wm. B. Hill.
Robertsburg	Putnam	574	20	68.9	+ 0.9	92	21	42	30	40	1.98	−0.34	0.60	0	9	15	4	11	.....	E. C. Brace, Jr.
Ryan	Roane	709	17	68.0	+ 1.8	88	21†	41	18	40	4.49	+1.80	1.23	0	9	16	6	8	.....	Wm. E. Ryan.
Sharples	Kanawha	.....	0	.....	.....	.....	.....	.....	.....	.....	2.49	.....	1.35	0	6	.....	.....	.....	.....	C. E. Rippetoe.
Spencer	Roane	784	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. M. McKown.
Sutton	Braxton	839	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lawrence Freeman.
Union	Monroe	2,250	16	66.6	+ 1.6	87	25	39	18	43	1.68	−0.96	1.00	0	5	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	10	65.2[a]	.....	85[a]	25	38	17	44[a]	3.32	.....	0.70	0	9	16	7	7	.....	J. M. Ayres.
Williamson	Mingo	660	20	68.6	+ 0.8	82	21†	48	30	25	2.79	−0.24	0.88	0	11	13	14	3	w.	J. F. Keyser.
Averages and	extremes	.....	....	67.5	+ 0.7	95	21	38	17†	44	3.08	+0.23	2.00	0	8	12	7	11	w.	
State averages and	extremes	.....	....	66.7	+ 1.0	96	28	34	30	50	3.14	+0.41	2.20	0	8	16	7	7	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for September, 1920.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac																																
Brandywine	do						.45			T.	.35		.10				.10							*	.30	T.	.10	.50					1.90
Burlington	do					*	2.03			T.	.47	T.		.17											T.		T.	.85			1.24		4.76
Harpers Ferry ‖	do						.32	T.		.32															T.	.10			2.00		.95		3.69
Martinsburg	do					*	1.95				.34						T.								.06			.30			.80		3.45
Moorefield	do						.65				.44																	.10	.05		1.07		2.31
Piedmont	do						.56	.01		.05	.34	.01	.05												T.		.04	T.	.51		.92		2.49
Romney	do						1.00				.75	.05																.40			1.05		3.25
Upper Tract	do					T.	.50				1.00														.15	T.					1.00		2.65
Wardensville	do																																
Northern Division.																																	
Bens Run	Ohio					.45				.03	1.36			.15			.15								.18		.02	.31			.61		3.26
Bruceton Mills ‖	Monongahela					.09		.45			1.35	T.	.10												T		T.	T.			.60		2.59
Buckhannon	do							.10			1.10		.12												T.	.35		T.			1.20		2.87
Cairo						.20				.14	.77	.01	.01				.11								.43			.07	.33				†††
Cortland ‖	Monongahela										.75		.14												.30		.20	.38			.78		2.55
Creston ‖	Little Kanawha	.20				T.	.25				.20	.45	.10				T.								.04	.12			.85		.80		3.01
Davis ‖	Monongahela	.16					T.			T.	95			.18			T.								T.	T.	.35		1.25		.80		3.69
Elizabeth	Little Kanawha						.30				.70		.17				.12							.06					.58		.35		2.28
Elkins ***	Monongahela					T.				.37	.29	.05	.04	.02			.09								.04	T.	T.	1.41	.02		1.02		3.35
Fairmont ‖	do						.36				1.74	.10	.26	.02			T.									T.			.87		.51		3.86
Glenville ‖	Little Kanawha	T.					.36				.30	T.	.10												.03				.10		.45		1.34
Grafton	Monongahela	.09				T.	.03	.18			1.00		T.	.83			.04								T.				.55		.50		3.22
Lost Creek	do					.75	.09				1.90		T.				.08								.06				.12		.84		3.84
Mannington	do					.59	.02			.01	1.80		.26				.02								.02	T.		1.45	.65		.56		5.38
Morgantown	do					.45	.63				1.22		.21																				2.51
Moundsville	Ohio					.22	.08			T.	1.30		.68															.40			.58		3.26
New Cumberland	do						.05				1.16	.02																	.20		.56		1.99
New Martinsville	do					.55	.20				2.20																	.90	.05		.45		4.35
Parkersburg ***	Ohio					.24					1.43	.21	.03	T.			T.	.18							.51			.64		.03	.42		3.69
Parsons	Monongahela													T.	1.62										T.			1.56			.15		3.33
Philippi	do	.13								T.	1.89	T.						.10							T.			.90	.50		.90		4.42
Pickens	do									.27	.30		.70				.16									T.		.05			1.70		3.18
Rowlesburg ‖	do										.93	.05	.53																.98		.55		3.04
Saint Marys ‖	Ohio	.10					.40				1.98		.08				.25								.05	.15			.50		.40		3.91
Smithfield ‖	Fishing Creek						.59			.01	1.85	.02	.09	.03											.03	.10			.57		.55		3.84
Stony River Dam ‖	Monongahela	.16					.10				.50	.06		.08											.10		.35		.90	.02	.90		3.17
Terra Alta	do							.07		.05	1.22	.01	.05	.09													.01		.85	.02	.76		3.13
Wellsburg	Ohio					.10				.18	1.77	.01		.04			.08										T.	.25	.25	T.	.75		3.43
Weston	Monongahela					.64	.01			.02	.89		.09				.16								.23				.16		.64		2.84
Wheeling ‖	Ohio						.33				.50	.02	.45				T.								T.	.05		.38	.21		.38		2.32
Southern Division.																																	
Bancroft ‖	Great Kanawha	.50					.30			T.	.30		.36				.20								.22	.30			.40		.50		3.08
Beckley	do																																
Bluefield	do			.02			.45		.03		.02		.25		.07		.02							.08	.54	.53	.11		.75		.93		3.80
Camden-on-Gauley ‖	do									.82	1.00	.80				20								.10			.10			.22		3.24
Charleston ‖	do	.68					.23				.35	T.	.90	.30			.50								T.	.10			.82		1.00		4.88
Clay ‖	do						.03			.20			.67											.10		.12		.15	.70		.58		2.55
Cuba	Sand Creek					.15			T.	.05	.18	.02	.40				T.								.45				.18		.45		1.88
Dam 19 O. R. ‖	Ohio					T.	.03			.01	1.94	.04	.05				.02								.25	.70			.50		.30		3.84
Dam 20 O. R. ‖	do					T.	.20				2.00	.05	.60												.40	.23			.30		.18		3.96
Dam 22 O. R. ‖	do	.40					.12				.05	T.	.95												.22	.12			.40		.45		2.71
Dam 26 O. R. ‖	do	.50									.28		.20												.58	.22			.35		.18		2.31
Evans	Ohio					.24				.19	.06		.90												.57				1.16		.44		3.56
Gary ‖	Big Sandy	.43			.03								.35		.05										.60	.50	.09		.16		.30		2.51
Green Sulpr. Spgs.	do																																
Hinton ‖	do	.04								T.	.24		.92	.02	.06			.02							.30	.04	.06		.86		.50		3.06
Holcomb	do	.41								.65	.82		.35				.15										.14				.77		3.29
Huntington ‖	Ohio	.08				T.	T.			1.00	.02		.70	.14			.02								.14	.02	T.	T.	.18		.12		2.42
Kanawha Falls ‖	Great Kanawha	.43									.70		1.00																		.90		3.03
Kayford ‖	do	.38				T.		.14	T.	.02	.38		1.30						.04						.43	.27	.16	.17	T.		.76		4.05
Lewisburg	do								T.	.16			.47				.07							T.	1.12	.06	.26		.38		.78		3.30
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do																																
Miller ‖	Meadow	.54									.67		1.06				.70							.14					.70		.60		4.41
Point Pleasant	Ohio					.10				.21			.45												.85			.08	.18		.42		2.29
Powellton	Great Kanawha	.40								.60							.20								.03		.38				.78		2.39
Raleigh ‖	do	.17									.20		1.14	.08											.43	.06			.08		.82		2.98
Renick ‖	do										.25		.50													1.10	.10				.87		2.82
Robertsburg ‖	do	.60								.10	.05		.18				.04								.44	.06			.20		.31		1.98
Ryan	do					.53				.24			1.23				.20								.41	.29	T.	.06	.81	T.	.72		4.49
Sharples ‖	Coal River						.02			.12			1.35				.10								.65						.25		2.49
Spencer ‖	Little Kanawha																																
Sutton	Great Kanawha																																
Union	do												.25											.10	.08				.25		1.00		1.68
White Sulphur Spgs.	do											.50					.02							.45	.50	.25	.70	.10		.60	.20		3.32
Williamson ‖	Big Sandy	.21			.08	T.	.30				.88		.45				.30								.21	.08	.04		.06		.18		2.79

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

††† Probably incomplete.

Daily Temperatures for September, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Brandywine	Maximum	83	82	75	75	65	80	79	81	75	70	85	84	78	76	80	80	75	78	81	80	72	78	70	80	85	84	85	80	78	65	..	78.0
	Minimum	60	55	49	45	45	61	45	50	58	60	56	60	45	45	50	53	43	37	40	45	61	45	46	58	60	58	60	52	47	49	..	51.3
Burlington	Maximum	80	76	70	73	66	76	75	78	73	74	78	82	75	74	76	79	71	77	78	70	68	76	71	79	83	83	83	78	77	62	..	75.4
	Minimum	49	47	44	42	48	48	55	44	53	59	59	66	59	48	51	54	44	41	53	43	54	56	47	62	59	60	61	58	47	50	..	52.0
Martinsburg§	Maximum	79	73	76	78	73	74	77	80	70	78	80	86	78	77	78	83	75	83	74	72	70	77	76	83	86	87	84	82	81	59	..	77.6
	Minimum	63	54	46	47	48	54	58	54	57	59	61	65	67	54	49	50	50	46	50	43	43	48	50	53	63	64	67	66	53	54	..	54.5
Moorfield	Maximum	80	75	76	79	73	80	80	82	78	76	81	88	80	80	79	79	76	84	84	76	73	80	75	84	88	89	85	82	80	70	..	79.7
	Minimum	54	54	54	51	54	65	62	54	66	65	66	68	67	54	58	59	53	56	56	52	59	62	54	63	65	65	67	67	54	55	..	59.3
Piedmont	Maximum	76	73	72	76	67	76	76	79	72	73	82	83	76	79	72	79	57	81	74	72	65	79	72	80	77	88	84	79	65	64	..	74.9
	Minimum	58	49	46	44	50	66	56	49	56	59	60	65	62	57	53	54	45	44	51	44	54	60	51	65	60	61	60	62	51	49	..	54.7
Romney	Maximum	75	76	77	73	71	75	79	78	74	75	78	82	80	74	78	82	75	73	69	69	67	72	71	79	84	83	77	67	74	74	..	75.4
	Minimum	50	46	41	41	42	58	57	49	53	59	56	60	65	50	48	46	44	42	55	43	56	56	69	65	58	60	62	50	47	48	..	52.5
Upper Tract	Maximum	80	79	78	78	76	81	80	80	79	70	80	85	79	80	80	80	82	81	81	83	80	80	80	81	82	84	82	..	..	78	..	80.0
	Minimum	49	46	44	44	44	60	49	46	58	58	58	58	58	44	46	45	40	42	43	43	51	53	43	41	52	58	58	..	..	47	..	49.3
Wardensville	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Northern Division.																																	
Bens Run	Maximum	80	76	79	82	74	82	80	83	80	75	83	82	81	83	84	83	77	81	80	85	89	89	89	87	89	91	89	79	75	63	..	81.7
	Minimum	60	52	46	51	61	61	57	54	60	63	60	66	58	55	57	64	52	49	54	48	58	57	52	65	61	65	64	54	51	48	..	56.8
Buckhannon	Maximum	75	70	75	70	72	72	75	76	77	74	75	79	75	77	78	75	74	74	75	78	81	82	81	82	81	82	83	74	74	65	..	76.0
	Minimum	66	48	46	50	51	56	51	48	60	62	60	57	50	51	48	60	58	42	48	46	55	54	41	67	60	61	60	58	48	47	..	53.6
Cairo	Maximum	80	75	80	83	72	82	77	78	79	72	82	81	83	80	83	82	75	81	89	85	87	87	88	84	85	87	86	78	..	..	..	81.1
	Minimum	59	47	42	48	57	57	52	50	58	63	56	63	60	50	50	61	45	43	46	46	50	53	48	62	63	62	60	62	..	..	..	54.0
Creston	Maximum	79	75	78	83	75	82	80	80	80	76	87	83	80	81	87	81	75	83	80	88	89	89	91	88	87	89	92	80	78	65	..	82.0
	Minimum	64	59	45	51	59	59	54	51	59	64	57	65	61	53	57	63	48	44	48	49	54	55	55	65	65	63	61	59	48	48	..	56.1
Elkins	Maximum	70	70	75	79	72	79	71	76	75	68	79	77	70	74	81	75	67	75	75	79	81	81	75	78	81	83	81	74	76	56	..	75.1
	Minimum	52	47	44	47	52	58	52	49	57	60	61	64	51	47	49	50	45	40	44	45	53	50	51	63	60	60	60	53	48	43	..	51.8
Fairmont§	Maximum	79	75	81	84	79	84	79	83	80	73	83	82	81	82	85	83	76	81	81	85	91	91	89	83	90	90	92	79	80	49	..	81.7
	Minimum	58	50	45	49	55	60	57	52	54	61	59	63	59	53	54	56	50	46	50	45	49	54	51	58	63	63	63	64	50	47	..	54.6
Glenville	Maximum	83	82	86	88	92	87	81	87	82	78	87	86	83	81	82	80	88	92	82	91	93	95	95	88	93	91	94	96	83	76	..	86.7
	Minimum	62	50	45	48	55	60	56	52	58	63	58	63	60	60	63	61	58	42	41	41	49	55	47	63	64	63	63	62	50	47	..	55.3
Grafton	Maximum	78	73	79	85	78	85	79	80	81	80	85	83	83	81	87	81	70	72	79	87	89	82	85	84	85	87	93	81	82	49	..	80.8
	Minimum	59	49	43	47	56	59	56	50	57	61	60	65	60	51	52	58	47	45	49	44	53	51	49	64	63	62	62	62	50	47	..	54.4
Lost Creek	Maximum	81	72	78	85	80	82	79	80	78	73	83	82	80	81	85	81	76	81	85	80	88	89	88	87	90	90	91	80	80	67	..	81.7
	Minimum	55	43	40	45	53	56	48	51	56	60	54	64	60	46	50	55	42	40	42	45	50	47	49	59	60	61	60	69	45	46	..	51.7
Mannington	Maximum	74	71	74	77	73	79	74	75	77	71	79	78	74	76	78	77	69	75	74	78	81	83	82	77	88	82	84	73	74	63	..	76.2
	Minimum	56	45	41	45	57	59	54	49	56	61	57	65	55	50	51	56	44	45	48	42	51	51	47	65	61	62	61	63	48	47	..	53.1
Morgantown	Maximum	80	75	81	83	77	84	77	82	78	74	82	80	76	77	84	82	73	85	78	83	88	87	82	81	87	86	90	82	78	68	..	80.7
	Minimum	60	46	46	52	60	60	56	51	58	60	61	65	59	50	49	60	46	50	54	54	57	59	60	66	63	64	61	52	54	45	..	55.9
New Cumberland	Maximum	73	70	75	79	71	80	77	79	75	76	81	82	74	77	82	80	72	80	70	77	85	84	85	78	88	84	87	79	67	52	..	77.3
	Minimum	56	49	45	49	58	59	54	51	52	59	59	63	54	53	53	53	50	47	50	42	47	54	53	54	65	63	63	60	50	46	..	53.7
New Martinsville	Maximum	76	74	79	83	74	82	79	84	82	76	86	83	81	85	86	84	80	82	81	84	88	88	90	85	92	90	90	81	75	64	..	82.1
	Minimum	59	51	49	50	59	60	57	52	58	63	60	66	56	54	55	61	52	48	52	46	56	57	54	64	64	65	63	54	51	47	..	56.1
Parkersburg	Maximum	77	73	77	79	71	83	78	78	79	73	83	82	76	80	84	80	73	80	77	83	87	83	86	84	86	87	89	78	74	53	..	79.1
	Minimum	62	55	50	56	64	62	58	53	63	65	60	67	62	58	55	61	54	47	53	54	58	61	57	67	66	64	65	58	53	47	..	58.5
Parsons	Maximum	74	75	77	77	78	79	77	76	76	69	78	76	81	78	76	77	78	76	82	85	84	78	78	77	85	84	85	84	78	57	..	77.8
	Minimum	55	43	42	43	43	54	49	48	53	55	56	56	43	43	43	43	43	44	41	52	52	46	46	64	59	62	61	55	51	45	..	49.7
Philippi	Maximum	75	73	76	80	81	81	74	75	80	73	78	79	75	78	83	83	84	78	77	84	80	86	86	83	82	86	86	89	79	77	..	80.0
	Minimum	55	45	44	50	50	59	56	50	49	59	59	60	62	60	57	57	54	46	57	54	57	59	50	53	61	62	61	60	50	44	..	54.6
Pickens	Maximum	73	..	..	..	73	80	76	79	75	65	81	80	73	78	82	75	70	79	79	81	83	82	80	79	85	85	86	75	77	56	..	77.3
	Minimum	50	..	..	..	50	53	50	46	55	60	52	58	49	45	47	53	41	38	45	48	52	51	50	55	58	58	58	50	44	40	..	50.2
Terra Alta	Maximum	70	70	70	75	76	77	70	75	74	68	77	76	70	71	79	74	65	78	71	78	78	71	72	76	81	81	87	74	76	66	..	74.2
	Minimum	55	40	40	41	50	57	54	43	49	52	60	60	51	44	45	48	40	38	54	38	46	56	50	61	60	56	55	58	45	34	..	49.3
Wellsburg	Maximum	76	73	75	80	72	82	77	78	78	75	82	81	78	78	81	81	73	79	72	79	85	84	86	78	84	84	80	78	68	60	..	77.9
	Minimum	54	45	40	45	56	58	54	58	50	59	58	65	51	56	49	49	47	43	48	39	50	52	46	57	61	62	59	60	48	45	..	52.1
Weston	Maximum	78	74	80	82	76	83	76	81	78	73	82	82	79	80	85	82	74	80	82	85	87	85	86	83	87	89	89	79	80	68	..	80.9
	Minimum	61	50	46	50	56	59	55	51	60	62	56	60	64	59	50	59	47	44	49	46	55	54	49	64	62	62	62	61	49	47	..	54.7
Wheeling§	Maximum	85	80	85	87	72	87	82	85	84	75	87	85	85	84	88	89	84	87	84	84	85	92	92	80	91	87	91	88	73	52	..	83.7
	Minimum	59	48	44	49	56	60	64	53	54	62	59	62	55	55	55	56	49	49	50	44	46	47	53	56	65	66	65	63	59	47	..	55.0
Southern Division.																																	
Beckley	Maximum	82	85	75	76	88	87	88	86	84	81	75	77	72	77	75	68	72	76	77	78	60	66	..	..	..	..	.	..	..	..	..	....
	Minimum	55	49	51	55	51	58	55	53	52	56	52	52	62	47	45	..	44	46	45	46	51	51	..	..	..	..	..	..	..	..	..	....
Bluefield	Maximum	79	76	76	68	74	73	73	69	77	72	76	77	77	77	79	77	75	78	79	79	80	76	72	81	74	82	84	77	76	70	..	76.1
	Minimum	62	54	56	55	56	55	55	53	59	62	60	58	54	59	51	61	46	43	48	53	54	56	54	63	66	57	58	57	48	41	..	55.1
Charleston	Maximum	86	76	80	82	80	81	77	78	79	81	84	80	80	84	85	81	81	80	80	85	87	90	89	92	90	91	90	89	81	74	..	83.1
	Minimum	65	56	53	55	60	61	60	59	60	59	61	60	60	60	61	59	54	52	59	51	58	60	59	59	61	62	67	64	59	48	..	58.7
Gary§	Maximum	80	76	78	82	78	80	79	76	80	70	84	80	76	80	84	78	77	81	82	85	87	83	78	82	84	86	87	76	79	48	..	79.3
	Minimum	64	59	55	53	57	58	58	57	58	61	57	60	63	61	56	60	51	48	50	54	56	55	54	55	62	63	63	62	54	47	..	57.0
Green Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Hinton §	Maximum	78	75	74	77	74	81	76	69	76	74	84	83	78	79	82	78	75	82	81	82	82	83	75	82	83	82	86	79	80	50	..	78.0
	Minimum	62	57	55	53	53	55	60	56	57	60	58	62	58	55	54	52	49	49	50	57	60	57	59	65	65	62	62	54	47	..	..	56.7
Holcomb	Maximum	75	73	79	78	72	80	75	78	77	80	82	81	74	77	82	78	71	79	79	83	84	81	79	84	83	82	83	75	78	64	..	78.2
	Minimum	61	48	45	48	56	53	53	44	45	55	55	58	59	48	45	53	44	38	41	48	50	54	48	63	56	54	54	58	45	43	..	50.7
Huntington §	Maximum	81	75	81	80	78	82	80	78	80	80	88	85	81	85	85	84	79	81	84	86	89	87	89	83	88	90	89	79	74	51	..	81.7
	Minimum	62	55	50	53	62	60	58	57	58	65	60	65	68	61	57	57	53	50	52	56	58	60	57	60	68	66	65	64	52	47	..	58.5
Lewisburg	Maximum	75	75	76	75	68	80	72	72	75	70	83	81	75	77	82	77	74	79	80	77	75	78	74	81	81	80	84	76	77	68	..	76.6
	Minimum	61	47	52	49	51	60	52	48	59	63	52	60	63	50	48	53	42	38	41	48	52	59	53	63	61	60	61	58	49	45	..	53.3
Marlinton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Point Pleasant	Maximum	81	76	82	81	74	86	83	83	81	80	87	85	84	84	87	81	79	86	83	90	95	89	88	87	91	91	90	91	75	66	..	83.9
	Minimum	59	50	45	53	63	59	55	52	60	65	59	66	60	57	53	67	50	46	50	50	72	56	54	66	64	64	64	62	53	47	..	57.4
Powellton	Maximum	82	75	84	83	..	..	..	..	84	..	..	..	86	83	85	80	77	81	88	86	87	85	83	86	89	87	87	78	81	72	..	83.0
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Robertsburg§	Maximum	79	76	80	86	79	80	83	81	81	77	87	84	80	84	87	84	78	84	83	91	92	88	91	86	90	88	91	79	76	51	..	82.5
	Minimum	60	51	48	53	62	59	55	52	59	64	55	60	64	57	52	58	52	44	49	51	55	56	53	58	56	59	63	61	51	42	..	55.3
Ryan	Maximum	80	79	81	81	70	80	77	81	78	75	82	81	81	81	83	82	81	81	82	86	88	85	85	88	86	88	87	84	80	70	..	81.4
	Minimum	61	47	43	50	57	56	52	50	58	65	53	62	58	53	48	58	46	41	45	49	54	54	62	65	63	61	62	59	46	47	..	54.5
Spencer §	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Union	Maximum	81	79	80	82	81	82	85	79	75	78	80	85	84	80	81	82	83	82	83	84	84	85	86	85	87	85	86	85	86	81	..	82.5
	Minimum	60	49	52	51	50	49	50	49	59	58	59	60	52	52	52	53	42	39	45	46	43	46	50	49	50	50	55	55	56	40	..	50.7
White Sulphur Spgs.	Maximum	78	75	77	67	80	73	73	75	78	83	83	78	82	80	81	80	82	77	79	81	76	74	75	85	85	84	79	76	54	..	..	77.4
	Minimum	48	50	48	58	58	53	50	58	62	54	57	63	48	49	52	43	38	40	48	54	59	53	62	63	60	61	58	49	48	42	..	52.9
Williamson §	Maximum	76	71	75	78	79	77	73	70	78	77	78	79	77	79	78	81	71	74	78	80	82	80	78	76	81	81	82	75	74	50	..	76.3
	Minimum	68	60	57	58	59	63	62	61	60	65	62	63	66	65	62	64	56	51	55	57	57	62	57	58	68	67	68	67	58	48	..	60.9

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, September, 1920.



U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY
FEB 8 1921

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

OCTOBER, 1920

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
JANUARY 24, 1921

Departure of the Mean Temperature from the Normal. October, 1920.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVIII. PARKERSBURG, W. VA., OCTOBER, 1920. No. 10.

GENERAL SUMMARY.

October was exceptionally dry, sunshiny, and moderately warm. While the average October rainfall was less during several years, one of the longest dry periods of State record prevailed from the 5th to the 25th, when there was no rain of consequence, except at one station (Cuba) on the 16th. Sunshiny and warm weather also prevailed during the dry period. There was an average of 22 clear days, equaling the State record, and the sunshine averaged more than 15 per cent above the normal. Heavy to killing frosts occurred on the 3d in some of the more elevated districts, but growth continued in the agricultural portion of the State until near the close of the month, when killing frosts were general. The conditions were exceptionally favorable for cutting, drying, and husking corn, and apple picking.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.18 and 30.22 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.48 inches on the 30th, and 29.66 inches on the 27th. Elkins, 30.47 inches on the 31st, and 29.61 inches on the 27th.

TEMPERATURE.

The monthly mean for the State, determined from 50 stations, was 57.5°. The departure from the normal for 43 stations having ten or more years of record was +2.4°. The first week was cool, the lowest temperatures of that period occurring on the 3d, when light to killing frosts occurred. The temperatures were generally much above the normal from the 9th to the 28th, with the highest readings occurring generally on the 20th and 21st. The last four days were cool and killing frosts were general on the 31st.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 83 per cent; 8 p. m., 69 per cent. The October averages for the same hours for the past 32 years are 83 and 70 per cent, respectively. Elkins, 8 a. m., 93 per cent; 8 p. m., 82 per cent. The October averages for Elkins for the same hours for the past 20 years are 89 and 78 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, determined from 66 stations, was 1.15 inches. The departure from the normal for 45 stations having ten or more years of record was —1.86 inches. Scattered light rains fell on the 1st and 4th and light to moderate showers were general daily from the 25th to the 29th. From the 5th to the 25th only the following rainfall was noted: Cuba, .15 inch on the 19th; Davis, trace on the 16th; Pickens, trace on the 23d; Elkins, trace on the 24th.

WIND.

The average wind velocity at Parkersburg was 3.8 miles per hour, or 1.1 miles below the October average for 30 years. The average at Elkins was 3.2 miles per hour, or 0.2 mile below the October average for 21 years. The highest velocity at Parkersburg was 20 miles per hour from the west on the 27th, and at Elkins 20 miles per hour from the south on the 27th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 67 per cent of the possible amount, or 17 per cent above the October average for 23 years. The average at Elkins was 61 per cent, or 14 per cent above the October average for 21 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22d, 23d, and 31st; Bluefield, 6th, 7th, 8th, 11th, and 19th; Charleston, 6th, 7th, 19th, 20th, and 23d; Creston, 5th, 6th, 7th, 8th, 9th, 10th, 13th, 18th, and 20th; Dam No. 22, Ravenswood, 9th, 10th, 20th, 21st, and 23d; Elkins, 3d, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 17th, 18th, 19th, 20th, 21st, 22d, 23d, 24th, 25th, and 26th; Fairmont, 7th, 8th, 9th, 18th, 20th, 23d, and 24th; Huntington, 7th, 8th, 9th, and 23d; Mannington, 3d, 7th, 8th, 9th, 11th, 17th, 18th, 19th, 20th, 21st, 24th, and 26th; Moundsville, 10th, 11th, 18th, 19th, 20th, 21st, 22d, 23d, and 24th; New Cumberland, 7th, 8th, 9th, 11th, 19th, 20th, 21st, 22d, 23d, and 24th; Robertsburg, 5th, 7th, 8th, 9th, 11th, and 17th; Romney, 20th; Smithfield, 7th, 8th, 9th, and 12th; Wellsburg, 6th, 7th, and 8th; Weston, 5th, 6th, 7th, 8th, and 9th; Wheeling, 5th, 7th, 8th, 9th, 11th, 13th, 14th, 15th, 17th, 18th, 19th, 20th, 21st, 22d, 23d, and 24th; Williamson, 7th, 8th, 9th, 10th, 14th, 17th, 20th, 21st, 22d, 23d, and 30th.

Halos, lunar: Elkins, 24th and 26th; Parkersburg, 17th.

Sleet: New Martinsville, 27th; Pickens, 27th and 28th; Smithfield, 28th; Wheeling, 28th and 29th.

Thunderstorms (dates and number of stations reporting): 3d, 1; 4th, 4; 5th, 2; 27th, 2; 28th, 1; 29th, 1.

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly cloudy.	Cloudy.
1891	51.5	95	21	1.97	2.91	T.	....	..	..	..
1892	52.6	89	24	0.83	1.45	0.21	...	..	..	..
1893	54.1	86	16	4.74	7.22	1.00	....	21	6	4
1894	54.4	88	22	2.32	3.85	1.17	T.	16	8	7
1895	48.1	89	8	1.29	2.25	0.16	T.	22	5	4
1896	51.0	82	20	2.08	4.37	0.45	T.	14	9	8
1897	58.2	95	22	0.53	2.27	0.07	0	18	7	6
1898	55.6	95	19	4.84	8.50	2.48	T.	11	10	10
1899	56.8	91	19	1.42	3.81	0.23	0	15	7	9
1900	60.9	97	24	2.33	4.80	1.15	0	16	8	7
1901	54.3	86	19	0.54	1.95	0.12	0	19	6	6
1902	56.5	87	17	2.63	5.50	0.90	T.	16	8	7
1903	54.2	96	15	2.55	4.75	0.80	T.	17	7	7
1904	54.5	92	16	1.59	3.02	0.37	T.	18	8	5
1905	54.2	95	19	4.71	8.26	2.46	T.	13	8	10
1906	54.5	86	12	3.09	8.15	1.64	1.3	11	6	14
1907	50.3	87	19	2.65	5.12	0.54	0.1	15	9	7
1908	55.1	91	16	1.60	6.88	0.33	T	18	7	6
1909	50.0	88	14	2.79	5.27	0.60	0.1	16	7	8
1910	58.1	95	15	1.85	2.96	0.80	0.7	18	7	6
1911	56.3	88	23	5.28	9.65	3.27	0	12	7	12
1912	55.5	93	20	1.34	3.10	0.20	T.	18	7	6
1913	54.5	92	12	4.50	8.11	1.78	0.3	12	6	13
1914	57.3	91	14	2.94	6.72	1.37	T.	12	8	11
1915	56.6	89	20	4.11	5.55	0.74	T.	17	7	7
1916	54.1	97	16	2.38	4.35	0.91	T.	19	5	7
1917	49.2	89	16	4.35	6.49	1.18	5.5	15	6	10
1918	58.2	89	24	3.68	7.53	1.59	T.	15	7	9
1919	62.3	102	28	5.84	11.88	2.13	0	9	7	15
1920	57.5	90	21	1.15	2.53	0.10	0.1	22	4	5
Means and extremes	54.9	102	8	2.73	11.88	T.	0.3	16	7	8

Climatological Data for October, 1920.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	4	55.9	.....	83	21	22	31	45	0.45	.....	0.45	T.	1	28	1	2	n.	Elmer Keister.
Burlington	Mineral	875	26	56.0	+ 2.2	82	21	29	7	40	0.73	−1.75	0.56	0	2	21	9	1	w.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	31	.....	.....	.....	.....	.....	.....	.....	0.60	−2.30	0.40	0	2	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	28	58.3	+ 3.9	84	12	32	7	43	0.50	−2.30	0.50	0	1	27	3	1	s.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	24	62.2	+ 6.9	88	21	38	30†	37	0.42	−1.85	0.30	0	2	31	0	0	.....	M. S. Henkel.
Piedmont	Mineral	919	7	57.2	.....	84	22	31	7	41	2.08	.....	0.92	T.	6	22	7	2	nw.	C. A. Suter, Jr.
Romney	Hampshire	824	22	56.0	+ 0.8	79	11†	28	7	39	1.68	−0.86	1.10	0	3	21	7	3	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	21	56.1[c]	+ 0.6	81[c]	11	29[c]	7†	46[c]	0.10	−2.19	0.10	T.	1	23[b]	0[c]	6[b]	w.	J. M. Mallow.
Wardensville	Hardy	1,200	2	.....	.....	.....	.....	31[k]	5†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Luther F. Sutton.
Averages and	extremes	.....	....	57.4	+ 2.9	88	21	22	31	46	0.82	−1.88	1.10	T.	2	25	4	2	w.	
Northern Division.																				
Bens Run	Pleasants	622	18	60.1	+ 3.4	87	21	30	31	40	1.19	−2.02	0.82	0	5	25	1	5	.....	J. D. Riggs.
Bruceton Mills	Preston	1,549	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. M. Wolf.
Buckhannon	Upshur	1,411	23	53.1	− 0.3	78	16	26	31	34	0.96	−2.42	0.48	T.	4	27	0	4	.....	H. A. Darnall.
Cairo	Ritchie	680	21	56.4	− 0.5	82	11†	23	31	44	1.94	−1.22	0.80	T.	7	23	2	6	.....	O. C. Hess.
Cortland	Tucker	3,300	4	.....	.....	.....	.....	.....	.....	.....	1.23	.....	0.76	1.0	3	23	5	3	.....	Samuel Harmon.
Creston	Wirt	701	18	58.6	+ 2.9	87	20	25	31	45	1.39	−1.71	0.61	T.	6	24	1	6	sw.	J. M. Reed.
Davis	Tucker	3,093	11	.....	.....	.....	.....	.....	.....	.....	1.88	.....	0.72	1.0	5	22	5	4	w.	Ross C. Male.
Elizabeth	Wirt	646	8	.....	.....	.....	.....	.....	.....	.....	1.07	.....	0.56	T.	5	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	19	53.7	+ 2.3	82	24	24	31	42	1.07	−1.35	0.75	0.3	5	16	9	6	w.	U. S. Weather Bureau.
Fairmont	Marion	883	14	58.3	+ 3.0	87	15	27	31	45	0.90	−1.91	0.46	T.	7	25	2	4	w.	F. P. Hall.
Glenville	Gilmer	738	26	59.4	+ 3.6	90	21	22	31	50	1.27	−1.83	0.58	T.	6	21	5	5	w.	Howard R. Brannon.
Grafton	Taylor	1,000	27	56.9[a]	+ 0.3	83	15†	26[a]	31	45	0.77	−2.26	0.60	T.	3	20[a]	7[a]	3[a]	e.	W. C. Byers.
Lost Creek	Harrison	1,026	22	56.8	+ 2.1	85	15†	22	31	49	0.80	−1.95	0.65	T.	3	25	2	4	w.	Allen Smith.
Mannington	Marion	974	17	55.5	+ 1.3	83	22	24	31	39	1.08	−1.96	0.60	T.	5	23	2	6	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	27	60.0[c]	+ 4.7	85[a]	12†	30[c]	30	40[c]	0.12	−3.09	0.10	0.2	2	10[a]	9[a]	5[a]	.....	Prof. E. L. Andrews.
Moundsville	Marshall	642	17	58.9	+ 3.2	87	17†	28	31	42	1.73	−1.47	1.10	0	4	18	8	5	w.	G. W. Wright.
New Cumberland	Hancock	987	22	58.7	+ 4.0	88	16	35	7†	41	1.79	−1.25	0.93	0	6	25	0	6	s.	M. F. Smith.
New Martinsville	Wetzel	634	26	60.1	+ 3.2	87	20	28	31	42	1.40	−1.53	1.15	T.	4	24	1	6	w.	Wm. Ankrom.
Parkersburg	Wood	638	33	59.8	+ 5.2	84	21	32	31	36	1.40	−1.04	1.14	T.	6	19	6	6	w.	U. S. Weather Bureau.
Parsons	Tucker	1,656	20	54.3[a]	+ 1.3	86[a]	23	21[a]	30	45[a]	0.80	−2.18	0.80	T.	1	24	1	6	.....	J. W. Swisher.
Philippi	Barbour	1,149	23	58.8	+ 4.5	84	25	29	29†	37	0.88	−2.01	0.46	T.	3	23	1	7	w.	Prof. Vernon E. Wood.
Pickens [a]	Randolph	2,697	17	54.0	+ 2.8	81	15	24	8	39	1.92	−2.22	1.13	T.	3	21	5	4	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	33	.....	.....	.....	.....	.....	.....	.....	1.91	−1.16	0.71	T.	6	.....	.....	.....	e.	J. F. Pierce.
Saint Marys	Pleasants	577	11	.....	.....	.....	.....	.....	.....	.....	1.20	−1.41	0.70	T	5	.....	.....	.....	w.	Wm. Hughes.
Smithfield	Wetzel	835	14	55.2	+ 1.7	81	20†	24	31	41	1.30	−2.26	0.65	T.	7	25	2	4	se.	G. M. Whisler.
Stony River Dam	Tucker	.....	0	59.6[a]	.....	86[a]	17†	25	29	51[a]	1.47	.....	0.61	T.	5	14	7	10	w.	A. C. Becker.
Terra Alta	Preston	2,612	19	53.2	+ 1.3	80	24	25	7	43	1.67	−1.89	0.90	3.0	7	20	5	6	e.	Dr. C. O. Gorby.
Wellsburg	Brooke	1,225	19	56.4	+ 2.4	81	20†	28	31	39	1.46	−1.41	0.94	0	5	23	2	6	w.	George P. Pfister.
Weston	Lewis	1,026	24	58.0	+ 2.2	86	21	26	31	43	0.98	−2.20	0.61	T.	6	20	6	5	n.	Weston State Hospital.
Wheeling	Ohio	645	33	60.6	+ 5.4	90	21	30	31	44	1.77	−0.87	0.95	T.	7	21	0	10	w.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	57.4	+ 2.6	90	21	21	30	51	1.29	−1.78	1.15	0.2	5	22	4	5	w.	
Southern Division.																				
Bancroft	Putnam	574	16	57.8	+ 0.5	85	21	28	30†	40	1.22	−2.08	0.72	T.	3	21	1	9	s.	R. E. Dent.
Beckley [c]	Raleigh	2,440	20	56.7	+ 1.5	85	20	28	6	41	.....	.....	.....	.....	.....	25	1	2	w.	John H. Ewart.
Bluefield	Mercer	2,558	25	56.6	+ 0.7	81	23	24	30	39	0.44	−2.49	0.14	0.5	4	23	5	3	.....	Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	5	.....	.....	.....	.....	.....	.....	.....	1.02	.....	0.80	T.	2	17	1	13	s.	Miss Katie Jarvis.
Charleston	Kanawha	597	17	63.0	+ 3.9	89	21	29	30†	40	1.40	−1.49	0.75	T.	3	13	4	14	.....	C. V. Lewis.
Clay	Clay	706	4	.....	.....	.....	.....	.....	.....	.....	1.32	.....	0.50	T.	5	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	18	59.0	+ 2.9	88	20†	25	31	45	0.85	−2.29	0.60	T.	4	21	6	4	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	4	.....	.....	.....	.....	.....	.....	.....	1.85	.....	1.40	T.	7	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	4	.....	.....	.....	.....	.....	.....	.....	2.53	.....	1.23	T.	6	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	5	.....	.....	.....	.....	.....	.....	.....	1.61	.....	1.20	0	5	.....	.....	.....	w.	Lockmaster.
Dam 26 O. R.	Mason	505	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Engineer Office.
Evans	Jackson	606	8	57.8	.....	78	17†	26	31	34	0.77	.....	0.61	T.	4	22	0	9	.....	B. F. Sayre.
Gary	McDowell	1,426	4	58.6[b]	.....	84[b]	20	23	30	43[b]	0.58	.....	0.39	T.	2	21	0	10	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Hinton	..do	1,450	23	57.4	+ 0.9	86	20	26	30†	41	0.46	−2.17	0.22	T.	6	20	1	10	n.	J. B. Lavender. C. E.
Holcomb	Nicholas	2,042	8	54.4	.....	85	17	24	31	47	1.45	.....	0.99	0.5	5	22	3	6	.....	W. C. Williams.
Huntington	Cabell	538	26	59.3	+ 3.5	83	15†	30	31	41	1.08	−1.49	0.84	0	6	21	4	6	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	1	.....	.....	.....	.....	.....	.....	.....	1.43	.....	0.65	T.	3	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	4	.....	.....	.....	.....	.....	.....	.....	1.42	.....	0.64	0	5	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	20	54.1	+ 0.5	81	22	23	31	43	0.34	−2.48	0.27	T.	2	25	2	4	sw.	Geo. T. Argabate.
Logan	Logan	687	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. C. Flanagan.
Madison	Boone	704	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. L. Brown.
Miller	Fayette	.....	0	.....	.....	.....	.....	.....	.....	.....	1.14	.....	0.50	0	4	.....	.....	.....	.....	J. R. Bays.
Point Pleasant	Mason	553	27	59.9	+ 2.4	88	21	29	30†	46	1.25	−1.50	0.90	0	5	19	5	7	.....	W. D. Holmes.
Powellton	Fayette	933	24	58.3[i]	+ 2.6	87[a]	25	29[i]	30†	39[i]	0.90	−1.56	0.50	0	4	18[a]	9[a]	3[a]	.....	Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	4	.....	.....	.....	.....	.....	.....	.....	1.47	.....	0.69	T.	4	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	4	.....	.....	.....	.....	.....	.....	.....	0.35	.....	0.30	0	2	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	20	59.3[a]	+ 2.0	87[a]	20†	27[a]	30	47[b]	0.71	−2.17	0.53	0	3	22	3	6	s.	E. C. Brace, Jr.
Ryan	Roane	700	17	57.0	+ 2.3	86	20†	21	31	48	1.27	−2.31	0.95	T.	6	24	2	5	.....	Wm. E. Ryan.
Sharples	Kanawha	.....	0	.....	.....	.....	.....	.....	.....	.....	1.54	.....	0.98	0	3	.....	.....	.....	.....	C. E. Rippetoe.
Spencer	Roane	784	16	56.4	+ 1.3	80	21	26	30	38	1.15	−1.88	0.48	T.	4	18[a]	8[a]	4[a]	.....	A. M. McKown.
Sutton	Braxton	839	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lawrence Freeman.
Union	Monroe	2,250	16	57.0	+ 3.0	86	22†	23	31	50	0.25	−2.75	0.25	0	1	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,910	10	55.0[a]	.....	83[a]	20†	24	30	48[a]	0.50	.....	0.25	0	2	26	1	4	w.	J. M. Ayres.
Williamson	Mingo	660	20	57.5	+ 1.0	79	20	29	30	37	1.60	−1.22	1.32	0	4	20	5	6	w.	J. F. Keyser.
Averages and	extremes	.....	....	57.6	+ 1.9	89	21	21	31	50	1.10	−1.99	1.40	0.3	4	21	3	7	w.	
State averages and	extremes	.....	....	57.5	+ 2.4	90	21	21	30†	51	1.15	−1.86	1.40	0.1	4	22	4	5	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for October, 1920.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac																											T.	.45	T.			0.45
Brandywine	do																									.17	.56						0.73
Burlington	do																											T.	.40				0.60
Harpers Ferry	do	.20																								T.		.50					0.50
Martinsburg	do					.12																							.30				0.42
Moorefield	do																									T.	.29	.58	.05	T.			2.08
Piedmont	do	.03	.92			.21																				*	1.10	.58					1.68
Romney	do																														T.		0.10
Upper Tract	do					.10																											
Wardensville	do																																
Northern Division.																																	
Bens Run	Ohio	.10																								.10	.12	.82	.05				1.19
Bruceton Mills	Monongahela																																
Buckhannon	do	.35																										.48	.08	.05			0.96
Cairo		.72				.15																				.02	.08	.80	.16	.01			1.94
Cortland	Monongahela	.37																										.76	.10				1.23
Creston	Little Kanawha	.25	T.			.15																					T.	.61	.30	.06	.02		1.39
Davis	Monongahela	.63					.45										T											T.	.72	.04	.04		1.88
Elizabeth	Little Kanawha	.06				.20																						.56	.16	.09	T.		1.07
Elkins***	Monongahela	.24			.01																				T.	T.		.75	.04	.03			1.07
Fairmont	do	.44	.02																									.02	.16	.18	.06	.02	T.	0.90
Glenville	Little Kanawha	.20	.06			.15																						.58	.26	.02	T.		1.27
Grafton	Monongahela		.08			.09																							.60	T.			0.77
Lost Creek	do	T.																										.65	.08	.07			0.80
Mannington	do	.33	.06			T.																				T.	T.	.60	.06	.03			1.08
Morgantown	do				10																									.02			0.12
Moundsville	Ohio	.18																								.25	1.10		.20				1.73
New Cumberland	do	.41	.01																							.17	.93	.06	.21	T.			1.79
New Martinsville	do	.10																								.10	1.15	.05					1.40
Parkersburg ***	Ohio	.02			.06																					.03	.46	.82	.01	T.			1.40
Parsons	Monongahela																												.80				0.80
Philippi	do	.31																										.46		.11	T.		0.88
Pickens	do	.48				.31																		T.				1.13	T.	T.			1.92
Rowlesburg	do	.71	.06			.11																							.67	.25	.11		1.91
Saint Marys	Ohio	.20																								.10	.70	.15	.05				1.20
Smithfield	Fishing Creek		.10			.18																				.01	.65	.16	.16	.04			1.30
Stony River Dam	Monongahela	.50	.16			.15																				.05			.61				1.47
Terra Alta	do	.43	.02	.01		.08																						.90	.06	.17			1.67
Wellsburg	Ohio	.09																								.15	.21	.94		.07			1.46
Weston	Monongahela	.17	.01			.10																						.61	.04	.05			0.98
Wheeling	Ohio	.35	.01																								.22	.95	.11	.12	.01		1.77
Southern Division.																																	
Bancroft	Great Kanawha	.17																										.72	.33	T.	T.		1.22
Beckley	do																																
Bluefield	do	.13																										.12	.14	.05			0.44
Camden-on-Gauley	do	.22																										.80		T.			1.02
Charleston	do	.75				T.																						.40	.25	T.			1.40
Clay	do	.30	.20			.08																						.50	.24		T.		1.32
Cuba	Sand Creek																			.15						T.	.05	.60	.05	T.			0.85
Dam 19 O. R.	Ohio	.08	.02			.06																						.12	1.40	.15	.02		1.85
Dam 20 O. R.	do	.10	.83																									.20	1.23	.13	.04		2.53
Dam 22 O. R.	do	.08	.04																									.12	1.20	.17	T.		1.61
Dam 26 O. R.	do																																
Evans	Ohio	.02				.11																						.03	.61		T.		0.77
Gary	Big Sandy	.39																												T.	.19	T.	0.58
Green Sulpr. Spgs.	do																																
Hinton	do	.06	.10			.04																						.08	.14	.04			0.46
Holcomb	do	.32				.10																						.95	.04	.04			1.45
Huntington	Ohio	.10				.04																				.06		.68	.16	.04			1.08
Kanawha Falls	Great Kanawha	.43																										.65	.35	T.			1.43
Kayford	do	.64	T.			.05																						.46	.18	.09			1.42
Lewisburg	do																											.27		.07			0.34
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do																																
Miller	Meadow	.50	.05																										.49	.10			1.14
Point Pleasant	Ohio	.07																								.02	.20	.90	.06				1.25
Powellton	Great Kanawha	.30																										.50	.05	.05			0.90
Raleigh	do	.07																										.49	.69	.22			1.47
Renick	do					.05																								.30			0.35
Robertsburg	do	.18																										.41	.12				0.71
Ryan	do	.14				.14																				.01	.95	.01	.02				1.27
Sharples	Coal River	.42																										.98	.14				1.54
Spencer	Little Kanawha	.22	T.			.05																							.40	.48			1.15
Sutton	Great Kanawha																																
Union	do																												.25				0.25
White Sulphur Spgs.	do																									.25	.25						0.50
Williamson	Big Sandy	.18																										1.06	.26	.10			1.60

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

Daily Temperatures for October, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Brandywine	Maximum	70	64	70	75	72	65	68	67	73	75	76	78	78	77	81	80	75	78	78	77	83	82	80	79	80	78	75	70	65	56	60	73.7
	Minimum	45	42	28	40	41	30	31	29	33	35	39	40	36	37	36	40	39	42	45	43	44	43	42	41	42	44	43	46	30	34	22	38.1
Burlington	Maximum	61	69	75	65	58	63	64	69	75	78	78	78	78	78	78	77	70	72	75	78	82	81	73	72	71	73	70	64	46	53	64	70.6
	Minimum	45	31	44	43	37	31	29	30	36	38	43	45	39	41	38	40	43	47	48	45	46	46	43	44	45	55	57	43	37	36	39	41.4
Martinsburg§	Maximum	57	65	70	79	68	56	64	71	79	80	80	84	82	83	81	82	75	62	76	77	81	83	73	72	73	79	76	57	48	55	67	72.1
	Minimum	49	39	36	38	51	41	32	35	36	43	46	48	48	47	45	46	47	48	42	52	51	52	52	41	46	49	56	49	39	39	36	44.5
Moorfield	Maximum	70	65	74	80	75	62	65	72	75	80	85	83	82	84	84	83	76	77	84	84	88	87	78	76	76	80	76	70	56	59	72	76.1
	Minimum	52	49	39	55	51	42	39	39	45	47	48	49	48	48	48	49	49	49	51	52	51	53	51	50	54	51	59	69	40	42	38	48.3
Piedmont	Maximum	55	64	74	76	69	58	66	68	73	79	83	80	82	78	79	80	70	71	77	79	78	84	71	70	73	72	68	62	42	47	65	70.7
	Minimum	43	49	33	44	42	36	31	32	39	44	47	47	45	44	42	43	45	46	52	48	49	48	49	48	49	56	58	38	35	36	39	43.8
Romney	Maximum	60	51	64	65	77	76	64	63	64	78	79	78	79	78	65	64	62	77	78	78	77	77	78	76	77	77	77	72	52	55	54	70.1
	Minimum	45	46	42	30	44	41	28	30	33	40	40	48	43	43	41	44	40	43	47	46	46	47	48	42	44	54	54	48	35	35	36	42.0
Upper Tract	Maximum	53	62	73	73	74	74	71	70	..	80	81	79	78	78	79	80	79	80	80	80	80	79	79	78	77	76	75	69	40	..	..	74.2
	Minimum	44	43	30	32	34	33	29	29	..	34	35	36	39	39	39	39	39	40	40	41	45	46	47	43	42	40	35	35	35	..	..	38.0
Wardensville	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	31	36	35	31	..	..	37	39	39	40	38	43	..	36	42	38	44	46	..	..	44	46	50	50	44	..	..	40.4
Northern Division.																																	
Bens Run	Maximum	59	64	74	79	68	67	68	75	77	79	82	83	83	84	85	80	78	78	84	85	87	86	84	83	69	65	69	57	46	53	63	74.0
	Minimum	46	42	40	50	44	40	48	39	42	44	48	49	45	46	45	50	48	48	48	53	51	53	54	57	55	51	56	42	34	33	30	46.2
Buckhannon	Maximum	50	58	66	72	62	55	58	60	68	70	74	72	70	75	74	78	65	73	72	77	70	71	65	60	65	76	61	52	40	55	49	64.9
	Minimum	44	41	34	45	44	33	31	30	37	38	43	44	40	41	40	44	43	43	45	46	48	47	45	50	50	50	52	40	32	34	26	41.3
Cairo	Maximum	50	76	72	78	66	60	66	72	75	78	80	81	81	82	82	80	77	78	81	82	82	82	81	81	71	70	65	61	45	52	60	72.5
	Minimum	46	35	41	45	41	36	31	37	31	36	40	38	38	38	39	43	41	43	43	45	46	46	44	43	51	53	58	39	28	28	23	40.2
Creston	Maximum	50	67	76	80	72	62	66	73	80	81	84	85	85	86	85	84	83	83	80	87	86	85	84	83	73	75	72	64	46	56	65	75.4
	Minimum	45	32	33	46	46	37	33	33	37	39	42	40	41	41	42	46	44	45	47	49	47	48	46	46	52	53	60	41	29	29	25	41.7
Elkins	Maximum	43	57	70	72	59	52	60	68	70	72	78	74	76	75	80	74	73	77	76	79	79	78	78	82	71	77	68	50	36	48	62	68.2
	Minimum	40	36	31	42	39	34	33	32	37	37	41	41	38	39	38	40	42	41	45	45	46	44	43	46	47	49	50	34	32	29	24	39.2
Fairmont§	Maximum	50	63	73	78	67	60	67	76	77	78	82	82	84	83	87	81	75	81	84	85	85	85	84	84	75	78	65	49	43	62	63	73.7
	Minimum	46	41	34	42	42	38	35	35	38	39	48	44	41	41	42	44	48	47	48	49	49	48	48	48	51	52	55	43	32	34	27	42.9
Glenville	Maximum	50	67	78	82	84	66	70	78	81	82	85	85	87	88	89	86	81	84	87	89	90	88	89	87	84	80	74	65	44	57	67	78.3
	Minimum	45	37	34	42	45	36	34	35	38	37	42	40	38	39	39	41	43	45	47	44	45	45	44	42	48	50	60	41	28	28	22	40.5
Grafton	Maximum	52	69	75	79	66	58	63	74	78	78	82	81	70	81	83	80	78	81	76	69	69	82	80	83	75	80	65	48	46	54	65	71.6
	Minimum	..	40	34	48	45	37	32	35	40	39	45	43	40	40	38	43	45	45	47	46	46	48	45	46	50	50	62	45	30	35	26	42.2
Lost Creek	Maximum	48	63	72	79	70	65	64	74	78	81	80	80	83	81	85	81	80	80	85	80	83	82	85	85	84	80	71	65	40	54	64	74.3
	Minimum	44	42	29	45	38	32	29	29	33	35	36	39	36	39	36	41	43	45	44	45	49	48	46	44	45	48	60	40	28	30	22	39.4
Mannington	Maximum	48	59	68	74	67	58	62	69	71	73	77	74	77	78	78	76	70	76	77	79	82	83	81	82	71	75	70	62	46	53	61	70.2
	Minimum	45	39	32	45	39	36	32	34	37	37	42	45	39	39	39	42	42	43	47	47	45	45	43	46	51	51	58	39	30	32	24	40.8
Morgantown	Maximum	48	62	..	78	68	58	62	72	76	77	81	85	81	81	85	83	74	80	84	84	84	83	83	83	74	77	70	64	42	55	60	73.1
	Minimum	42	40	..	41	44	38	33	32	42	46	52	57	54	..	..	59	46	52	55	54	58	53	49	56	59	58	59	40	33	30	35	46.9
New Cumberland	Maximum	58	62	72	77	62	60	65	73	78	78	80	79	82	81	82	88	74	77	79	85	84	82	82	81	72	70	68	50	47	53	63	72.4
	Minimum	46	41	45	45	40	44	35	35	38	42	45	47	45	45	45	47	47	48	49	50	51	50	50	50	51	56	59	44	36	35	35	45.0
New Martinsville	Maximum	53	67	76	80	70	67	68	78	80	81	83	85	84	84	86	82	80	81	86	87	86	86	85	83	71	70	70	64	48	56	65	75.5
	Minimum	46	38	36	48	43	46	36	38	41	42	47	47	42	43	45	48	48	48	50	52	51	51	49	50	54	55	59	40	34	31	28	44.7
Parkersburg	Maximum	50	63	73	80	64	60	65	72	76	79	81	82	83	83	82	79	76	78	80	84	84	84	80	82	69	66	70	53	47	53	62	72.3
	Minimum	46	44	41	58	49	43	36	37	40	44	49	50	47	48	50	57	50	50	51	54	54	54	53	52	57	57	53	39	35	34	32	47.2
Parsons	Maximum	57	46	72	70	61	57	64	54	72	74	70	78	78	79	80	78	75	79	80	81	83	83	86	77	80	71	58	41	51	64	..	70.0
	Minimum	42	41	32	40	41	34	32	41	35	31	35	35	37	34	35	35	43	42	44	45	44	41	43	45	50	56	41	31	30	21	..	38.6
Philippi	Maximum	45	66	66	75	70	56	63	71	74	76	79	79	80	80	83	76	75	78	82	82	81	81	82	83	84	79	77	59	39	52	61	72.1
	Minimum	41	38	40	45	43	33	30	34	40	43	49	51	46	47	55	55	45	60	60	55	52	50	51	50	52	57	57	39	29	32	29	45.4
Pickens	Maximum	56	57	70	72	60	52	61	60	70	73	78	76	78	78	81	74	76	77	76	78	79	76	78	..	74	77	67	48	35	47	61	68.2
	Minimum	36	34	31	41	45	43	27	24	36	38	39	42	41	43	43	43	46	42	45	46	47	49	49	48	..	48	50	45	33	27	27	39.7
Terra Alta	Maximum	47	55	68	71	66	52	60	70	69	72	75	75	77	77	69	68	70	71	73	76	76	74	71	80	67	71	66	57	37	44	58	66.5
	Minimum	40	40	37	49	45	32	25	27	42	48	42	50	42	43	43	35	40	38	44	43	42	43	44	40	42	45	55	34	27	29	33	40.0
Wellsburg	Maximum	58	62	71	76	66	62	63	67	75	76	78	78	79	79	80	75	72	74	76	81	81	74	74	78	70	69	69	63	47	57	60	70.6
	Minimum	45	41	32	46	38	40	33	35	38	40	40	49	40	40	42	42	45	46	42	45	46	47	46	46	47	52	54	59	42	35	30	42.3
Weston	Maximum	49	62	73	78	67	58	65	73	76	78	81	81	82	82	84	80	78	81	83	84	86	84	81	84	75	81	73	63	46	52	63	73.6
	Minimum	44	42	34	46	45	37	32	33	38	40	44	42	41	42	41	47	43	44	47	47	48	48	46	45	51	51	61	42	31	32	26	42.3
Wheeling§	Maximum	52	69	78	85	72	68	72	64	84	85	87	87	88	88	89	83	80	82	87	89	90	89	80	85	72	70	65	59	50	58	65	76.2
	Minimum	45	40	37	44	42	43	37	39	40	42	45	50	45	46	47	50	48	48	48	50	50	50	50	50	51	56	59	45	35	32	30	45.0
Southern Division.																																	
Beckley	Maximum	..	..	60	70	69	68	60	67	69	75	72	79	80	80	75	77	74	75	80	85	77	79	78	73	78	78	76	44	70	69	..	72.8
	Minimum	..	..	31	30	29	28	30	32	36	35	36	39	39	40	41	43	43	48	48	48	46	43	48	45	50	62	55	29	43	40	..	40.6
Bluefield	Maximum	47	59	69	69	66	61	60	68	73	72	79	76	77	77	78	79	78	76	79	78	80	80	81	75	75	76	75	67	42	52	66	70.6
	Minimum	39	36	32	35	52	46	33	31	36	38	40	42	42	38	41	58	45	54	49	50	51	48	52	49	46	56	62	39	29	24	31	42.7
Charleston	Maximum	67	72	75	80	82	80	74	73	79	81	85	84	86	85	80	85	88	83	85	87	89	88	85	86	82	88	78	64	55	57	62	78.9
	Minimum	46	41	50	50	51	42	40	42	41	45	48	44	46	48	50	50	52	56	55	50	51	54	53	55	52	53	55	45	36	29	29	47.1
Gary§	Maximum	58	64	74	76	70	59	65	67	71	75	85	81	81	82	82	80	80	80	81	84	83	..	..	..	80	79	..	..	..	..	..	75.7
	Minimum	42	36	36	40	44	42	36	37	38	41	42	43	40	40	41	42	45	46	48	50	46	47	47	49	45	48	55	45	32	23	25	41.6
Green Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Hinton §	Maximum	52	66	74	77	68	60	59	70	68	70	81	83	82	83	82	83	82	80	82	86	84	83	82	78	72	69	78	47	44	42	67	72.1
	Minimum	43	36	36	38	43	43	37	37	39	42	42	45	44	44	43	45	45	47	47	52	50	51	51	50	47	46	52	47	32	26	26	42.8
Holcomb	Maximum	45	59	72	73	62	54	62	69	71	73	80	76	76	77	80	76	85	80	78	81	80	80	80	79	76	79	75	61	40	48	63	70.6
	Minimum	40	34	29	38	46	38	28	29	33	33	37	36	36	37	37	40	38	45	45	42	46	44	42	44	44	46	59	38	28	28	24	38.2
Huntington §	Maximum	52	66	76	81	71	60	66	72	76	79	82	82	82	82	83	82	80	80	81	83	83	81	82	82	70	71	68	50	46	56	65	73.2
	Minimum	46	40	38	40	49	42	37	36	38	41	44	45	45	46	47	43	51	50	50	54	53	53	53	53	53	57	60	47	36	31	30	45.4
Lewisburg	Maximum	45	59	69	72	65	60	62	66	73	73	77	75	76	77	78	76	77	75	78	80	80	81	79	76	73	77	74	64	41	53	64	70.2
	Minimum	41	37	29	36	44	34	28	29	34	35	36	40	35	36	35	38	41	44	44	43	46	44	42	42	39	46	62	41	25	30	23	38.0
Marlinton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Point Pleasant	Maximum	54	68	76	86	72	63	69	76	81	83	85	87	87	86	86	84	83	85	87	87	88	86	85	86	76	67	69	64	47	58	65	76.6
	Minimum	44	40	38	52	41	37	45	34	37	41	42	42	41	42	43	51	46	45	47	50	49	48	46	47	52	53	59	39	31	29	29	43.2
Powellton	Maximum	51	64	74	78	68	60	65	69	73	79	80	79	..	79	81	80	80	80	81	83	84	82	82	83	87	81	76	68	48	51	64	73.7
	Minimum	..	..	..	..	..	..	..	38	40	42	..	42	43	47	47	47	51	51	50	49	49	50	48	53	60	45	34	29	29	50	48	42.9
Robertsburg§	Maximum	51	67	76	81	66	63	..	75	80	80	83	84	86	86	86	85	80	84	85	87	87	85	87	83	72	72	68	50	47	58	68	75.4
	Minimum	45	39	37	44	44	39	32	..	33	39	43	41	41	41	44	44	50	45	49	50	54	49	47	48	53	53	59	45	32	27	28	43.2
Ryan	Maximum	65	66	72	80	71	60	65	72	77	80	83	83	84	84	84	82	81	81	83	86	86	85	85	83	83	75	71	60	45	55	65	75.2
	Minimum	44	35	30	44	43	33	30	29	32	33	37	35	37	38	37	42	41	42	44	46	45	45	44	45	53	51	60	40	26	24	21	38.9
Spencer §	Maximum	60	52	70	77	63	57	62	68	72	74	76	77	76	78	77	77	75	75	78	79	80	78	78	70	72	72	70	72	62	62	62	71.0
	Minimum	45	39	35	48	43	36	31	32	34	37	43	41	41	41	43	45	44	45	46	49	48	48	46	53	53	51	48	45	31	26	29	41.8
Union	Maximum	45	64	70	75	75	76	78	80	80	81	83	84	83	81	82	85	84	82	83	84	85	86	85	86	86	83	78	75	69	47	65	65	76.7
	Minimum	40	31	28	41	42	41	28	31	37	38	40	41	40	38	37	40	39	37	38	39	40	40	41	40	39	46	48	42	27	26	23	37.4
White Sulphur Spgs.	Maximum	62	71	74	68	64	66	69	74	78	80	79	79	78	81	80	80	75	78	82	83	83	80	76	75	79	75	49	38	54	64	..	72.5
	Minimum	33	30	36	40	36	31	30	30	37	38	42	35	30	35	38	42	41	45	45	46	44	42	45	40	44	52	45	26	28	24	32	37.5
Williamson §	Maximum	50	60	69	70	67	58	61	65	69	71	74	76	75	75	76	77	75	76	77	79	78	76	78	76	70	76	66	48	38	52	62	68.4
	Minimum	45	40	41	42	51	45	39	39	43	43	49	50	50	48	48	49	52	52	54	54	54	54	54	54	55	55	58	45	36	29	30	46.6

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches

WE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

UNIVERSITY OF ILLINOIS LIBRARY
MAR 4 1921

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

NOVEMBER, 1920

BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
FEBRUARY 15, 1921

Departure of the Mean Temperature from the Normal, November, 1920.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVIII. PARKERSBURG, W. VA., NOVEMBER, 1920. No. 11.

GENERAL SUMMARY.

The month was exceptionally cloudy and somewhat colder and considerably wetter than usual, with the precipitation favorably distributed throughout the month and fairly well distributed over the State. The snowfall was also considerably in excess of the normal. The highest and lowest temperatures for the entire month compared favorably with past Novembers, but the low temperature on the morning of the 14th was near or slightly below the previous State record for the first fifteen days in November. The ground was generally bare when the temperature was lowest, causing some damage to winter grains. The conditions were also somewhat unfavorable for farm work, especially corn husking.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.18 and 30.19 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.63 inches on the 13th, and 29.59 inches on the 22d. Elkins, 30.64 inches on the 13th, and 29.66 inches on the 17th.

TEMPERATURE.

The monthly mean for the State, determined from 48 stations, was 41.6°. The departure from the normal for 42 stations having ten or more years of record was —1.3°. Seasonably warm weather prevailed from the 1st to the 10th, except the 3d, which was somewhat cooler than usual, with the highest temperatures of the month occurring generally on the 1st. From the 10th to the 19th the temperatures were continuously below the normal, with the lowest readings occurring on the 14th. The last decade was seasonably warm, except two or three days, which were practically normal.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 80 per cent; 8 p. m., 71 per cent. The November averages for the same hours for the past 32 years are 81 and 72 per cent, respectively. Elkins, 8 a. m., 85 per cent; 8 p. m., 77 per cent. The November averages for Elkins for the same hours for the past 20 years are 84 and 73 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, determined from 66 stations, was 3.21 inches. The departure from the normal for 45 stations having ten or more years of record was +0.74 inch. The precipitation was heaviest over the central and eastern counties and lightest over the western sections. The greater part of the precipitation was received on the 2d, 15-17th, 22-25th, 28th, and 30th, the greatest amounts being recorded on the 8th, 16-17th, 23d, and 28th. Light to moderate snow fell from the 15th to the 18th and in a few of the more elevated localities from the 23d to the 25th.

WIND.

The average wind velocity at Parkersburg was 5.1 miles per hour, or 0.9 mile below the November average for 30 years. The average at Elkins was 5.0 miles per hour, or 0.7 mile above the November average for 21 years. The highest velocity at Parkersburg was 24 miles per hour from the west on the 2d, and at Elkins 28 miles per hour from the west on the 17th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 33 per cent of the possible amount, or 3 per cent below the November average for 23 years. The average at Elkins was 36 per cent, or 3 per cent below the November average for 21 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Bancroft, 4th, 5th, 6th, 11th, 13th, and 14th; Creston, 11th; Elkins, 6th, 21st, and 22d; Fairmont, 6th, 7th, and 11th; Hinton, 4th, 20th, and 21st; New Cumberland, 6th and 11th; Parkersburg, 11th; Pickens, 24th and 25th; Rowlesburg, 4th, 6th, and 22d; Smithfield, 3d, 4th, 5th, 6th, and 11th; Stony River Dam, 3d, 24th, and 28th; Terra Alta, 23d, 24th, 25th, and 26th; Wheeling, 6th, 7th, 11th, and 14th; Williamson, 4th, 5th, 6th, 19th, 20th, 25th, and 27th.

Halos, lunar: Pickens, 21st; Piedmont, 26th; Wellsburg, 20th.

Sleet: Bluefield, Camden-on-Gauley, Elkins, Moorefield, and Romney, 16th; Brandywine and Cairo, 17th; Davis, 26th and 27th; Smithfield, 22d; Stony River Dam, 29th; Terra Alta, 23d; Upper Tract, 15th and 16th.

Thunderstorms: Glenville, Cairo, and Mannington, 17th.

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly Cloudy.	Cloudy.
1891	42.5	80	8	3.04	....	....	....	..	..	..
1892	41.7	81	3	3.10	....	....	...	..	..	..
1893	41.4	74	3	2.12	3.22	0.47	....	13	6	11
1894	39.8	82	5	2.11	3.47	0.25	....	12	6	12
1895	44.6	87	12	2.35	4.00	0.20	....	12	8	10
1896	48.1	80	10	3.50	5.07	1.56	....	10	8	12
1897	45.0	76	13	4.45	7.15	0.30	....	9	9	12
1898	41.4	75	— 3	2.84	4.74	1.00	....	9	11	10
1899	45.6	76	14	1.93	3.49	0.20	T.	11	9	10
1900	45.5	86	9	5.20	8.88	2.71	2.8	8	8	14
1901	38.0	79	7	2.51	5.35	1.23	4.3	8	6	16
1902	50.3	83	12	3.27	4.56	1.23	0.7	11	6	13
1903	38.0	80	— 4	2.46	4.98	0.67	4.6	11	8	11
1904	41.2	75	9	0.64	3.05	0.07	1.4	12	7	11
1905	41.8	74	10	2.44	5.67	0.67	T.	13	7	10
1906	44.2	84	13	2.39	5.50	0.35	2.2	15	5	10
1907	41.8	74	13	3.40	7.05	1.41	1.0	10	8	12
1908	43.3	81	0	1.14	2.73	0.48	5.2	15	8	7
1909	49.1	84	12	1.34	3.85	0.23	0.2	14	7	9
1910	37.3	75	5	1.95	4.41	0.66	1.8	8	7	15
1911	40.5	83	7	2.74	5.54	1.27	2.0	10	7	13
1912	42.8	78	2	1.69	4.08	0.40	0.9	14	7	9
1913	44.5	82	— 1	4.49	7.50	0.61	13.4	12	5	13
1914	42.6	84	2	1.32	2.27	0.50	2.9	16	6	8
1915	45.2	85	11	3.06	5.99	1.15	1.1	13	8	9
1916	43.8	81	8	1.77	3.07	0.75	0.3	16	5	9
1917	39.6	78	0	0.89	3.65	0.05	1.5	16	4	10
1918	42.9	79	12	1.89	4.60	0.64	0.2	13	5	12
1919	44.4	80	10	4.51	7.53	0.85	0.3	12	6	12
1920	41.6	89	5	3.21	5.69	1.47	4.1	9	4	17
Means and extremes ..	43.0	87	— 4	2.59	8.88	0.05	2.3	12	7	11

Climatological Data for November, 1920.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Dixon.
Brandywine	Pendleton	.....	4	40.2	.....	75	1	5	14	44	3.15	.....	.....	8.0	7	13	0	17	s.	Elmer Keister.
Burlington	Mineral	875	26	41.4	− 0.7	70	1	9	14	32	3.01	+1.45	1.91	3.0	5	6	14	10	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.52	+2.29	3.00	0	7	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	28	42.8	+ 0.1	72	1	15	14	34	3.73	+1.63	2.23	1.0	8	12	2	16	ne.	G. W. Van Metre, C. E.
Moorefield[a]	Hardy	900	24	45.4	+ 1.8	75	1	15	18	48	2.83	+1.29	1.81	.....	4	18	1	10	.....	M. S. Henkel.
Piedmont	Mineral	919	7	40.4	.....	63	2†	11	14	28	3.02	.....	1.45	4.8	7	7	9	14	se.	C. A. Suter, Jr.
Romney	Hampshire	824	22	42.0	− 0.7	68	8	9	14	34	3.85	+1.93	3.00	3.0	7	9	4	17	.....	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	21	41.8[b]	− 1.7	72[a]	2	7[b]	14	43[b]	1.77	+0.25	0.55	7.5	7	5	5	20	w.	J. M. Mallow.
Wardensville	Hardy	1,200	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Luther F. Sutton.
Averages and	extremes	.....	....	42.0	− 0.2	75	1	5	14	48	3.24	+1.47	3.00	3.9	6	10	5	15	w.	
Northern Division.																				
Bens Run	Pleasants	622	18	42.7	− 0.6	71	1	16	14	35	1.99	−0.58	0.75	10.0	13	8	9	13	.....	J. D. Riggs.
Bruceton Mills	Preston	1,549	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. M. Wolf.
Buckhannon	Upshur	1,411	23	39.8	− 1.7	63	21	11	14	33	4.50	+1.20	1.40	5.0	10	11	2	17	.....	H. A. Darnall.
Cairo	Ritchie	680	21	41.2	− 1.5	68	1	8	14	39	3.15	+0.55	0.71	4.5	12	10	3	17	.....	O. C. Hess.
Cortland	Tucker	3,300	4	.....	.....	.....	.....	.....	.....	.....	1.68	.....	0.87	6.0	8	9	3	18	.....	Samuel Harmon.
Creston	Wirt	701	18	43.2	− 0.5	73	1	10	14	38	2.84	+0.36	1.03	2.5	12	10	3	17	sw.	J. M. Reed.
Davis	Tucker	3,093	11	.....	.....	.....	.....	.....	.....	.....	4.50	.....	1.75	10.5	13	8	6	16	w.	Ross C. Male.
Elizabeth	Wirt	646	8	.....	.....	.....	.....	.....	.....	.....	2.11	.....	0.92	.....	8	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	19	39.3	− 0.3	70	1	8	14	36	3.72	+0.86	1.40	3.9	13	8	5	17	w.	U. S. Weather Bureau.
Fairmont	Marion	883	14	41.1	− 1.4	70	1	13	13†	38	3.27	+0.57	1.34	2.0	12	14	1	15	w.	F. P. Hall.
Glenville	Gilmer	738	26	43.4	− 0.2	76	1	9	14	45	3.61	+0.65	1.25	4.2	12	9	7	14	w.	Howard R. Brannon.
Grafton	Taylor	1,000	27	40.4	− 2.5	70	1	10	14	34	2.80	−0.18	.....	.....	9	6	9	15	e.	W. C. Byers.
Lost Creek	Harrison	1,026	22	41.3	− 1.0	73	1	6	14	41	3.66	+1.21	1.40	3.5	9	10	3	17	w.	Allen Smith.
Mannington	Marion	974	17	41.2	− 0.1	69	1	10	14	36	3.26	+0.80	0.74	4.3	13	8	4	18	w.	Jas. A. Morgan.
Morgantown	Monongalia	1,250	27	41.6[c]	− 1.8	68[c]	1	14[c]	14	28[c]	3.22	+0.32	.....	2.0	.....	4[f]	5[f]	15[f]	.....	Prof. E. L. Andrews.
Moundsville	Marshall	642	17	43.2	0	68	1	13	14	33	1.85	+0.11	0.80	2.0	7	7	4	19	sw.	G. W. Wright.
New Cumberland	Hancock	987	22	40.7	− 0.6	78	1	15	14	40	1.62	−0.24	0.70	2.0	10	9	2	19	n.	M. F. Smith.
New Martinsville	Wetzel	634	26	43.6	− 0.9	72	1	13	14	40	2.08	+0.58	0.80	.....	10	9	5	16	w.	Wm. Ankrom.
Parkersburg	Wood	638	33	43.0	− 0.2	68	1	15	14	26	1.82	−1.01	0.73	2.7	11	7	5	18	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	20	38.8	− 2.2	72	1	5	15	40	4.85	+2.42	.....	5.0	.....	10	1	19	.....	J. W. Swisher.
Philippi	Barbour	1,149	23	42.8	− 0.3	75	1	11	13†	31	4.24	+1.48	0.90	.....	12	11	2	17	w.	Prof. Vernon E. Wood.
Pickens	Randolph	2,697	17	37.4	− 3.2	65	7	6	13	36	3.99	+0.14	1.09	13.0	10	13	2	15	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	33	.....	.....	.....	.....	.....	.....	.....	4.11	+1.06	1.32	.....	11	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	11	.....	.....	.....	.....	.....	.....	.....	2.56	−0.09	0.60	3.0	13	.....	.....	.....	w.	Wm. Hughes.
Smithfield	Wetzel	835	14	39.0	− 2.2	68	4	10	13	41	3.86	+0.85	1.02	5.4	16	12	3	15	se.	G. M. Whisler.
Stony River Dam	Tucker	.....	0	44.3[a]	.....	66[a]	2†	13	13	52[a]	1.49	.....	0.45	6.2	11	6	2	22	w.	A. C. Becker.
Terra Alta	Preston	2,612	19	36.8	− 3.9	65	1	6	14	32	2.53	−0.52	0.55	6.0	12	9	5	16	w.	Dr. C. O. Gorby.
Wellsburg	Brooke	1,225	19	40.4	− 0.9	66	1	10	14	31	3.48	+1.32	1.12	3.0	12	8	5	17	w.	George P. Pfister.
Weston	Lewis	1,026	24	42.6	− 0.7	72	1	12	14	36	3.86	+0.66	1.30	5.4	13	10	3	17	ne.	Weston State Hospital.
Wheeling	Ohio	645	33	41.8	− 0.3	75	1	15	14†	40	2.18	−0.26	1.35	4.4	13	14	1	15	w.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	41.2	− 1.2	78	1	5	15	52	3.06	+0.49	1.75	4.9	11	9	4	17	w.	
Southern Division.																				
Bancroft	Putnam	574	16	40.4	− 4.4	71	1	12	14	41	2.02	−0.40	1.00	7.0	13	10	1	19	nw.	R. E. Dent.
Beckley	Raleigh	2,440	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John H. Ewart.
Bluefield	Mercer	2,558	25	43.0	− 1.5	71	6	14	13	41	5.35	+3.02	1.78	3.1	14	10	7	13	.....	Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	5	.....	.....	.....	.....	.....	.....	.....	5.03	.....	1.30	6.0	10	5	2	23	n.	Miss Katie Jarvis.
Charleston	Kanawha	597	17	47.6	− 0.6	80	7	16	14	19	4.58	+1.66	1.40	1.2	10	14	2	14	e.	C. V. Lewis.
Clay	Clay	706	4	.....	.....	.....	.....	.....	.....	.....	3.75	.....	1.35	1.0	13	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	18	43.5	− 0.3	68	23	10	16	36	2.08	−0.13	0.60	2.0	10	7	9	14	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	4	.....	.....	.....	.....	.....	.....	.....	1.83	.....	0.91	2.6	12	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	4	.....	.....	.....	.....	.....	.....	.....	1.91	.....	0.65	.....	13	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	5	.....	.....	.....	.....	.....	.....	.....	1.83	.....	0.90	.....	9	.....	.....	.....	se.	Lockmaster.
Dam 26 O. R.	Mason	505	4	.....	.....	.....	.....	.....	.....	.....	2.06	.....	0.70	.....	8	.....	.....	.....	.....	U. S. Engineer Office.
Evans	Jackson	606	8	42.4	.....	67	21	11	14	35	2.04	.....	0.53	3.0	9	5	5	20	.....	B. F. Sayre.
Gary	McDowell	1,426	4	.....	.....	.....	.....	10[b]	13	.....	4.17	.....	1.13	.....	12	.....	.....	.....	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Gwinn.
Hinton	..do	1,450	23	40.8	− 3.3	68	1†	13	14†	42	4.78	+2.66	1.52	0.5	10	4	0	26	w.	J. B. Lavender, C. E.
Holcomb	Nicholas	2,042	8	39.0	.....	68	1	10	14	41	5.69	.....	1.60	8.5	17	11	3	16	.....	W. C. Williams.
Huntington	Cabell	538	26	41.9	− 2.2	71	1	17	14†	40	2.19	−0.53	1.02	6.1	12	9	4	17	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	1	.....	.....	.....	.....	.....	.....	.....	3.63	.....	1.40	1.0	6	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	4	.....	.....	.....	.....	.....	.....	.....	3.89	.....	0.72	.....	11	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	20	41.2	− 0.3	72	1	7	13†	40	4.70	+2.46	1.45	3.0	11	10	2	18	nw.	Geo. T. Argabate.
Logan	Logan	687	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. C. Flanagan.
Madison	Boone	704	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. L. Brown.
Miller	Fayette	.....	0	.....	.....	.....	.....	.....	.....	.....	5.02	.....	0.97	.....	8	.....	.....	.....	.....	J. R. Bays.
Point Pleasant	Mason	553	27	43.8	− 1.2	72	1	11	18	43	1.93	−0.85	0.48	5.0	11	5	10	15	.....	W. D. Holmes.
Powellton	Fayette	933	24	42.6[d]	− 2.2	75[d]	1	17[d]	13	43[d]	4.34	+1.63	1.22	3.3	10	9[a]	6[a]	14[a]	.....	Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	4	.....	.....	.....	.....	.....	.....	.....	4.60	.....	2.00	2.5	7	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	20	41.0	− 2.4	76	6	12	14	48	1.60	−0.80	0.50	3.0	9	7	2	21	.....	E. C. Brace, Jr.
Ryan	Roane	700	17	41.0	− 2.1	73	1	8	13†	46	3.38	+0.95	1.06	4.9	13	10	3	17	.....	Wm. E. Ryan.
Sharples	Kanawha	.....	0	.....	.....	.....	.....	.....	.....	.....	1.88	.....	0.63	1.0	6	.....	.....	.....	.....	C. E. Rippetoe.
Spencer	Roane	784	16	39.8	− 3.8	65	21	12	14	33	2.99	+0.48	1.80	.....	7	5	8	17	.....	A. M. McKown.
Sutton	Braxton	839	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lawrence Freeman.
Union	Monroe	2,250	16	41.8	+ 3.8	71	2	10	13†	40	4.05	+2.18	1.00	.....	7	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	10	40.0	.....	71	1	6	13	47	3.44	.....	1.50	0.5	9	11	3	16	e.	J. M. Ayres.
Williamson	Mingo	660	20	41.4[a]	− 4.0	68[a]	1†	18	18	39[a]	2.80	+0.22	0.91	.....	8	11	0	19	w.	J. F. Keyser.
Averages and	extremes	.....	....	41.8	− 2.0	80	7	6	13	49	3.35	+0.86	2.00	3.3	10	8	4	18	w.	
State averages and	extremes	.....	....	41.6	− 1.3	80	7	5	14	52	3.21	+0.74	3.00	4.1	10	9	4	17	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for November, 1920.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac																*	1.90														
Brandywine	do		.30							.05		.05					*	1.91					.05					T.	.80		T.		3.15
Burlington	do		.68													.30	*	1.91					T.					T.			.12		3.01
Harpers Ferry	do		T.	.30							.05					.05	.40	3.00	T.					.42					.30				4.52
Martinsburg	do		.32					T.		.10	T.					.10	*	2.23					.30					.12			.56		3.73
Moorefield	do		.28													.30	1.81												.44		T.		2.83
Piedmont	do		.55					T.		.02	T.					.16	1.45	.72					.03		T.	T.		T.			.09		3.02
Romney	do							.05		T.			T.			.09	3.00						.10					*	.15		.46		3.85
Upper Tract	do		.15	.15						.10							.31	.36										.15	.55		T.		1.77
Wardensville	do																																
Northern Division.																																	
Bens Run	Ohio		.25					.02	.04	.10						.04	.09	.75					.18	.13	.05	.02		.02			.30		1.99
Bruceton Mills	Monongahela																																
Buckhannon	do		.70					T.		.55			T.	T.		.10	1.40	.40					.45	.35	.10	.10					.35		4.50
Cairo			.38					.01		.36	.02					.09	.71	.55					.15	.45	.09	.04	T.				.30		3.15
Cortland	Monongahela		.87							.25	.10	.10				.09	.09	.09	.09														1.68
Creston	Little Kanawha		.10	.25						.20	.25					.03	.10	1.03	.10					.60	.10	T.	.05		.03				2.84
Davis	Monongahela		.06	.96	T.				.05	.29	.24		T.	T.		.09	.09	.09	.27	T.				T.	.09	1.75	.22	T.	T.		.30		4.50
Elizabeth	Little Kanawha		.09	.20						.16						.08	.06	.92						.35							.25		2.11
Elkins ***	Monongahela	T.	.62	T.				T.	T.	.22			T.			.19	1.23	.49					.21	.03	.05	.18	.05	.16	.12		.17		3.72
Fairmont	do		.10	.61					T.	.05	.24					.05	.04	1.34	.07					.56	T.	.09	.09		.03				3.27
Glenville	Little Kanawha		.06	.42						.12	.30					.12	.06	1.25	.05					.98	.08	.12	.05						3.61
Grafton	Monongahela		*	.80						T.	T.	T.	T.			*	*	*	1.27						*	*	.73						2.80
Lost Creek	do		.70					T.		.21	T.		T.			.12	1.40	.38					.12	.60	.09	T.		T.			.04		3.66
Mannington	do		.53					T.		.30	.02					.08	.65	.74					.23	.22	.05	.11	.07	.02			.24		3.26
Morgantown	do		.85													.04	.04	.09					*	*	*	*	*	*	*	*	2.20		3.22
Moundsville	Ohio		.20								.10							.80			.40			.10		.15			.10				1.85
New Cumberland	do		.12	.12					.14	.08	.05		T.			T.	T.	.70	.10				.02	.12		.17							1.62
New Martinsville	do		.40							.05						T.	.06	.80					.15	.15	.10	.05		.02			.30		2.08
Parkersburg ***	Ohio	T.	.16					.01		.11						.05	.62	.18					.19	.19	.06	.02		T.			.23		1.82
Parsons	Monongahela		1.00					T.		*						.18	.09		.18	*			2.30	*	*	*					1.10		4.85
Philippi	do		.73							.40	.30						.90	.55					.09	.25	.55	.23	.04	.03			.17		4.24
Pickens	do		.97						.23	1.09			T.				.27	.54					.22		.20	.20			.12		.15		3.99
Rowlesburg	do		T.	.80					.03	.08	.42					T.	.16	1.32	.26					.43	.04	.28	.29		T.				4.11
Saint Marys	Ohio		.15	.10						.05	.32					.03	.08	.69	.42					.50	.10	.13	.03		.05				2.56
Smithfield	Fishing Creek		.33	.25					.01	.11	.25					.10	.06	1.02	.25		.75			.46	.03	.20	.02	.01	.01				3.86
Stony River Dam	Monongahela		.22	.45					.06	.04	.17		T.			.18	.09	.18								.02	.04		.04	T.	T.		1.49
Terra Alta	do								.02	.40	.15	T.				.16	.50	.30	T.				.13	.05	.33	.30		.08			.11		2.53
Wellsburg	Ohio		.33					.09		.10			T.			.08	.30	.94					.16	.06	.10	1.07	.05	T.			.20		3.48
Weston	Monongahela		.62					.01		.40	.05		T.			.14	1.30	.42					.12	.45	.07	.05		.03			.20		3.86
Wheeling	Ohio		.10	.11					.03	.02	.08					.02	.01	1.35	.17					.14		.12	.02		.01				2.18
Southern Division.																																	
Bancroft	Great Kanawha		.03	.15					.02	.23	.06					.05	.08	1.00	.05				.02	.27	.04	.02		T.	T.				2.02
Beckley	do																																
Bluefield	do		.34	.06						.03	.18	.43	T.			.43	1.58	.18	.10	.05			T.	.02	.01	T.			1.78		.16		5.35
Camden-on-Gauley	do		.80							1.00				T.		.08	1.00	.16	.08	.08	T.		.33	T.					1.30		.20		5.03
Charleston	do		.10	.35					T.	.78	.25					T.	.20	1.20	.10				T.	.50	.35	T.			.75				4.58
Clay	do		.16	.23						.10	.30					.12	.20	1.35	.15					.50	.10	.06	.05		.43				3.75
Cuba	Sand Creek				T.							.20	.14					T.	.60	.19				.50	.15	.05	.05			.05	.15		2.08
Dam 19 O. R.	Ohio		.08	.09					.02	.02	.07					.02	T.	.91	.03				T.	.48	.04	.06	T.		.01				1.83
Dam 20 O. R.	do		.10	.12					.02	.05	.12					.04	.02	.65	T.				.22	.40	.08	.07		T.	.02				1.91
Dam 22 O. R.	do		.04	.15						.08		T.	T.			.20	.10	.90	.05	T.				.25	.06	T.	T.						1.83
Dam 26 O. R.	do	.14		.09						.18		.11						.70					.37	.12					.35				2.06
Evans	Ohio		.02							.28						.07	.53	.43					.07	.36	T.	.03		T			.25		2.04
Gary	Big Sandy	.04	.06	.14	.02						.19	.23					1.06	1.13	T.		.10		T.	.10						.50	.60	T.		4.17
Green Sulpr. Spgs.	do																																
Hinton	do		.16	.32						.08	.18					.16	.66	1.52	T.					.14	T				1.20	.36			4.78
Holcomb	do		.65	.02					.07	.58	.17	.03				.26	1.60	.45					.38	.09	.05	.12	.08	.16	.80		.18		5.69
Huntington	Ohio		.04	.10						.04						.08	.10	.92	.06				.22	.30	.06			.02	.16				2.10
Kanawha Falls	Great Kanawha		T.	.20						T.	.40						.48	1.40	T.					.40	T.				.75				3.63
Kayford	do			.32						.08	.17					.16	.30	1.32	.15					.54	.11				.72	.02			3.89
Lewisburg	do		.32	.03						.02	T.	.33	T.			.31	1.45	.30					.29	T.				.09	1.19		.37		4.70
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do																																
Miller	Meadow			.58						.17	.39		T.			.70	.95	.65							.61			.97					5.02
Point Pleasant	Ohio		.14							.24	.02					.05	.06	.48					.31	.30	.06			.08			.19		1.93
Powellton	Great Kanawha		.33							.28	.12		T.			.25	1.22	.18	.22				.50			T.	.20	T.			1.04		4.34
Raleigh	do																																
Renick	do		.50									.52				.20	.05	2.00						.30					1.03				4.60
Robertsburg	do									.31	.15					T.	.05	.50	.04				.10	.30	.05			T.	.10				1.60
Ryan	do		.30					T.		.46			.02			.07	1.06	.41					.17	.30	.05	.02	.06	.01	T		.45		3.38
Sharples	Coal River			.38						.35							.10							.10					.63		.32		1.88
Spencer	Little Kanawha			.22						.35	.36					.10	.08	T.							1.80	.08	T.	T.	T.				2.99
Sutton	Great Kanawha																																
Union	do			.30								.25				1.00	.75						.10						1.00		.65		4.05
White Sulphur Spgs.	do	.10									.30	T.				.02	1.10	.02	T.									1.50	T.		.40		3.44
Williamson	Big Sandy		T.	.40						T.	.10					.30	.78	T.	T.				.15	.16					.76	.15			2.80

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

Daily Temperatures for November, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Brandywine	Maximum	75	68	67	66	65	65	60	64	65	60	50	43	42	45	40	30	30	45	50	58	60	54	50	45	42	40	40	37	42	40	..	51.3
	Minimum	35	40	37	22	35	23	33	34	49	45	39	26	6	5	20	17	15	22	29	28	30	29	28	27	40	35	22	34	35	34	..	29.1
Burlington	Maximum	70	56	53	60	60	57	53	61	65	63	50	42	35	41	37	34	37	42	56	64	60	45	46	47	48	47	40	43	41	41	..	49.3
	Minimum	38	41	39	28	36	29	33	45	47	41	33	23	13	9	22	27	32	28	24	38	29	35	40	39	44	39	30	37	35	34	..	32.9
Martinsburg§	Maximum	72	56	52	60	63	58	51	59	62	50	48	37	39	43	36	39	40	46	56	63	56	50	46	51	49	46	43	44	40	43	..	49.9
	Minimum	38	45	41	34	35	36	37	44	46	46	41	35	22	15	16	31	32	33	28	32	35	36	42	42	44	39	36	39	38	36	..	35.8
Moorfield	Maximum	75	68	63	67	67	64	58	65	..	65	54	51	43	50	41	38	56	53	62	66	61	49	48	48	47	48	47	46	43	42	..	54.7
	Minimum	41	47	41	34	48	34	41	53	..	50	46	38	22	18	35	26	34	15	18	18	25	39	42	43	43	45	38	40	37	33	..	36.0
Piedmont	Maximum	62	63	46	42	57	55	52	59	62	63	50	41	36	39	34	33	34	38	52	57	54	42	43	44	44	42	40	43	41	40	..	46.9
	Minimum	42	45	38	30	40	31	35	46	48	39	36	23	17	11	25	30	30	31	26	38	31	34	38	39	40	39	33	37	35	30	..	33.9
Romney	Maximum	65	64	50	62	61	60	58	68	64	63	45	45	33	41	41	36	35	39	58	60	61	61	44	43	44	44	44	43	43	40	..	50.5
	Minimum	37	40	38	29	42	28	32	45	46	45	37	29	17	9	23	30	31	29	24	45	28	36	39	39	38	39	30	35	35	30	..	33.5
Upper Tract	Maximum	71	72	50	62	61	60	60	64	64	63	61	56	56	50	..	42	40	44	55	58	60	58	59	59	50	49	46	45	43	42	..	55.2
	Minimum	29	36	36	24	31	26	28	30	36	36	37	..	13	7	..	26	26	26	26	34	35	28	30	30	30	29	24	23	30	32	..	28.5
Wardensville	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Northern Division.																																	
Bens Run	Maximum	71	58	45	60	64	63	64	62	60	59	52	43	35	43	37	36	36	45	56	64	67	60	45	40	44	42	44	47	52	48	..	51.4
	Minimum	41	40	37	32	36	35	34	48	49	42	32	25	17	16	32	32	29	21	24	36	32	40	35	39	39	37	35	37	34	32	..	34.0
Buckhannon	Maximum	54	50	45	44	60	50	60	60	58	50	45	33	30	40	34	38	36	40	50	52	63	50	45	45	45	42	47	54	48	..	..	47.1
	Minimum	34	45	36	27	33	29	38	50	50	43	33	25	12	11	30	30	28	29	25	34	30	30	33	33	37	37	29	38	28	34	..	32.4
Cairo	Maximum	68	58	54	64	59	62	61	57	58	58	51	46	33	40	38	36	35	40	53	61	66	59	46	41	43	42	44	50	53	48	..	50.8
	Minimum	37	54	33	25	27	27	39	50	45	35	34	29	10	8	29	32	28	19	21	30	28	36	35	37	39	36	33	36	29	29	..	31.7
Creston	Maximum	73	64	53	60	64	67	64	60	59	60	54	50	39	45	40	38	36	44	59	66	68	58	47	42	43	42	44	53	57	50	..	53.3
	Minimum	40	50	34	33	30	29	41	51	46	36	33	29	12	10	30	32	28	20	22	33	34	38	35	38	39	35	32	42	28	31	..	33.0
Elkins	Maximum	70	59	41	59	56	61	64	53	58	56	51	37	29	41	34	36	33	39	54	60	64	48	38	37	37	36	40	43	46	54	..	47.8
	Minimum	38	41	35	29	32	26	34	48	50	37	34	15	10	8	29	30	25	27	28	33	28	29	33	34	35	27	27	37	33	32	..	30.8
Fairmont§	Maximum	70	58	42	60	63	64	61	58	58	48	55	36	36	42	36	35	32	41	55	60	68	59	39	40	41	41	43	46	61	45	..	49.8
	Minimum	32	44	37	30	33	34	43	50	39	32	29	13	13	18	31	30	29	27	30	36	31	35	35	39	36	35	36	31	31	31	..	32.4
Glenville	Maximum	76	70	57	64	67	71	69	67	58	61	58	51	39	47	48	36	36	47	61	67	70	69	49	42	42	45	44	56	59	52	..	55.9
	Minimum	35	45	34	28	28	26	38	55	46	37	31	28	10	9	28	31	28	18	20	30	27	32	35	36	39	35	29	38	25	29	..	31.0
Grafton	Maximum	70	59	52	64	59	61	63	58	58	47	53	34	34	35	35	36	36	39	54	54	55	55	40	40	41	41	44	45	54	48	..	48.8
	Minimum	37	44	35	30	30	30	38	49	48	38	31	28	12	10	28	42	29	28	22	33	30	32	35	36	38	35	32	36	26	29	..	32.0
Lost Creek	Maximum	73	62	50	60	65	60	64	62	57	58	54	44	36	43	38	35	35	40	57	64	68	60	47	39	41	44	42	48	60	45	..	51.7
	Minimum	37	45	34	26	29	26	38	39	47	37	30	31	8	6	25	31	27	23	29	39	27	33	33	35	38	35	30	36	24	28	..	30.9
Mannington	Maximum	69	58	52	60	62	60	59	57	58	58	54	44	35	41	36	35	35	41	55	64	65	57	47	40	42	42	42	46	57	45	..	50.5
	Minimum	36	46	37	27	28	28	39	49	48	37	30	27	11	10	28	32	29	24	23	35	29	33	35	37	39	36	34	34	27	29	..	31.9
Morgantown	Maximum	68	64	50	57	61	56	60	56	57	57	54	41	35	40	35	34	39	38	44	66	60	..	44	40	40	..	40	41	40	..	..	48.8
	Minimum	47	48	35	34	40	31	38	46	50	39	31	24	15	14	29	28	28	29	32	38	40	..	36	38	34	..	34	35	34	..	..	34.3
New Cumberland	Maximum	78	63	44	58	58	58	49	56	64	46	50	33	35	40	36	36	36	39	48	59	60	51	42	43	44	40	42	48	50	49	..	48.5
	Minimum	38	45	38	32	34	33	35	42	41	41	31	27	17	15	16	30	31	28	29	33	36	40	37	37	40	36	35	35	28	28	..	32.9
New Martinsville	Maximum	72	61	53	63	63	62	58	59	61	64	54	54	38	42	40	40	40	45	57	66	66	63	52	45	46	45	43	48	60	45	..	53.5
	Minimum	38	50	38	29	33	33	42	48	47	40	32	28	15	13	30	32	30	24	26	26	34	41	39	39	40	38	36	36	30	31	..	33.6
Parkersburg	Maximum	68	64	46	60	60	60	59	55	60	48	51	37	34	41	38	34	34	40	55	63	65	58	40	43	43	42	45	48	54	46	..	49.7
	Minimum	47	39	38	35	40	34	46	49	48	40	34	23	18	15	32	32	29	27	35	46	43	39	36	40	40	34	36	38	38	34	..	36.2
Parsons	Maximum	72	57	40	61	67	65	66	56	56	55	45	34	33	46	37	35	55	37	39	59	64	46	41	38	37	42	40	52	52	50	..	49.2
	Minimum	30	35	35	29	28	25	33	47	47	45	34	20	8	6	5	30	29	25	25	25	25	26	33	33	33	35	27	28	27	28	..	28.5
Philippi	Maximum	75	64	60	59	58	62	54	60	57	65	57	46	31	42	35	33	34	38	53	62	69	59	59	48	38	39	42	45	53	46	..	51.8
	Minimum	56	46	40	30	36	31	40	42	48	49	30	25	11	11	27	30	25	27	27	35	40	41	39	32	33	33	33	20	37	35	..	33.9
Pickens	Maximum	63	57	39	57	56	63	65	53	54	54	51	35	30	42	33	35	32	35	49	55	49	53	40	35	35	34	39	35	49	57	..	46.1
	Minimum	27	36	31	35	28	28	40	44	47	45	34	15	6	9	26	30	20	21	20	35	32	33	30	30	31	25	21	28	24	33	..	28.8
Terra Alta	Maximum	65	53	45	54	58	54	58	52	52	53	47	42	27	38	33	35	45	33	47	54	59	44	37	33	33	33	36	35	35	41	..	44.4
	Minimum	43	40	30	28	32	26	36	38	42	35	30	19	11	6	20	25	23	23	26	41	31	32	30	29	32	30	29	32	30	27	..	29.2
Wellsburg	Maximum	66	60	54	58	57	52	47	54	61	58	48	42	33	38	37	36	36	39	49	60	60	55	49	44	44	43	40	46	49	49	..	48.8
	Minimum	36	49	39	27	30	30	35	45	48	40	25	26	14	10	25	25	33	27	22	37	32	27	36	39	40	39	34	36	26	27	..	32.0
Weston	Maximum	72	62	52	60	63	65	68	57	58	59	55	48	35	43	38	36	36	38	56	64	68	63	50	40	41	41	43	48	58	50	..	52.2
	Minimum	40	47	36	29	33	30	40	40	49	41	31	29	13	12	29	31	28	25	29	36	32	35	34	36	38	37	31	39	28	31	..	33.0
Wheeling§	Maximum	75	63	44	62	65	65	49	58	60	46	56	39	40	45	37	35	35	44	68	68	60	53	41	45	44	41	40	46	56	49	..	51.0
	Minimum	36	42	39	32	32	34	35	42	44	40	30	27	16	15	15	31	31	28	28	36	36	40	37	32	36	35	36	35	31	31	..	32.7
Southern Division.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Bluefield	Maximum	70	67	57	62	63	71	66	65	60	58	53	48	34	43	42	35	33	41	56	61	67	60	44	40	40	47	45	50	38	45	..	52.0
	Minimum	36	49	35	30	43	30	37	47	50	41	43	24	14	15	33	32	22	27	28	38	36	42	31	32	34	32	36	34	35	34	..	33.9
Charleston	Maximum	61	74	61	65	68	69	80	78	68	58	53	55	53	53	58	53	48	57	58	57	59	58	68	66	60	58	59	62	67	64	..	61.9
	Minimum	40	39	32	36	30	35	31	53	54	50	42	30	17	16	17	21	19	21	28	32	35	37	35	29	40	37	38	36	33	35	..	....
Gary§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30.1
	Minimum	32	32	37	30	30	27	28	36	49	46	44	30	11	14	..	17	17	19	..	25	28	30	35	36	29	29	39	36	30	36	..	33.3
Green Sulphur Spgs.	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Hinton §	Maximum	68	50	55	52	67	58	55	55	60	55	55	35	28	43	38	35	34	51	62	68	68	58	41	43	41	46	44	56	45	44	..	50.3
	Minimum	30	43	40	31	31	27	28	36	50	46	43	33	14	13	13	33	29	21	21	26	30	29	32	37	33	33	29	33	40	37	..	31.4
Holcomb	Maximum	68	61	54	58	58	66	67	60	55	55	53	44	29	44	39	34	34	41	48	57	62	51	42	38	38	38	43	50	45	51	..	49.4
	Minimum	36	40	34	25	26	25	33	48	46	39	38	24	11	10	11	30	23	13	19	17	28	30	32	32	34	32	26	35	34	31	..	28.7
Huntington §	Maximum	71	60	50	63	63	65	65	58	62	48	53	35	35	44	39	34	35	45	56	64	69	52	41	48	48	44	44	52	50	48	..	51.4
	Minimum	32	49	37	32	32	32	33	45	52	42	36	30	18	17	17	31	28	16	16	30	35	37	37	37	34	34	33	37	31	31	..	32.4
Lewisburg	Maximum	72	65	55	61	62	66	66	63	61	58	57	50	36	41	37	34	33	41	55	69	64	60	43	41	41	42	40	50	45	43	..	51.4
	Minimum	40	43	37	22	36	33	34	51	47	43	41	24	7	7	31	31	24	19	19	25	24	28	33	33	36	34	25	35	35	34	..	31.0
Marlinton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Point Pleasant	Maximum	72	65	52	64	66	66	61	58	61	62	56	51	37	42	41	46	37	40	54	64	68	65	50	45	47	45	44	52	57	52	..	51.0
	Minimum	44	49	34	30	31	30	42	51	47	49	13	28	14	13	32	31	29	11	24	40	32	46	35	39	40	30	42	38	28	32	..	33.5
Powellton	Maximum	75	67	..	..	..	67	70	..	59	60	57	53	34	45	42	36	34	39	51	54	60	49	47	48	52	43	45	50	62	45	..	51.7
	Minimum	44	48	..	..	..	30	27	..	46	35	44	29	17	25	33	33	28	18	26	30	41	37	33	35	36	37	31	31	38	37	..	33.4
Robertsburg§	Maximum	74	61	50	64	65	76	65	57	61	50	53	33	39	41	38	34	34	43	57	44	67	52	41	46	43	43	46	54	57	47	..	51.3
	Minimum	30	50	42	30	30	28	31	45	48	35	32	29	13	12	17	31	28	14	14	27	32	35	36	36	38	30	31	35	28	31	..	30.6
Ryan	Maximum	73	62	50	61	63	69	63	57	59	60	56	44	37	48	38	38	34	40	58	68	68	59	50	45	43	43	46	52	56	48	..	52.9
	Minimum	36	49	30	23	23	23	36	50	47	31	28	25	8	8	30	30	26	10	17	28	26	36	35	36	36	26	29	39	22	31	..	29.1
Spencer §	Maximum	62	60	62	60	58	60	64	55	61	50	52	33	33	43	36	33	34	39	40	48	65	53	40	41	40	40	44	50	52	45	..	48.4
	Minimum	43	38	38	32	28	28	31	44	48	38	32	30	13	12	31	31	19	19	19	27	34	45	35	35	35	34	32	30	27	27	..	31.3
Union	Maximum	70	71	62	64	65	66	67	69	70	65	64	52	30	40	40	35	35	43	56	60	58	57	51	40	42	41	43	45	43	42	..	52.9
	Minimum	43	40	38	24	32	34	35	45	44	40	39	24	10	10	28	30	25	21	21	30	29	28	25	26	32	34	33	34	32	33	..	30.6
White Sulphur Spgs.	Maximum	71	48	60	66	68	68	61	64	49	58	40	44	45	38	35	31	43	55	61	65	48	38	42	41	45	41	48	40	48	..	..	50.4
	Minimum	41	39	23	27	21	26	35	46	46	42	31	8	6	15	33	28	22	19	19	24	26	28	36	38	36	32	33	38	35	37	..	29.7
Williamson §	Maximum	68	62	50	50	65	68	61	58	58	53	43	32	32	48	58	33	38	48	58	61	48	42	46	43	44	43	47	44	44	..	..	49.8
	Minimum	35	45	48	36	36	32	34	39	53	45	43	31	20	20	20	21	28	18	19	26	30	33	30	38	34	34	32	36	36	39	..	33.0

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, November, 1920.



NWE

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

MAR 24 1921

CLIMATOLOGICAL DATA

WEST VIRGINIA SECTION

DECEMBER, 1920

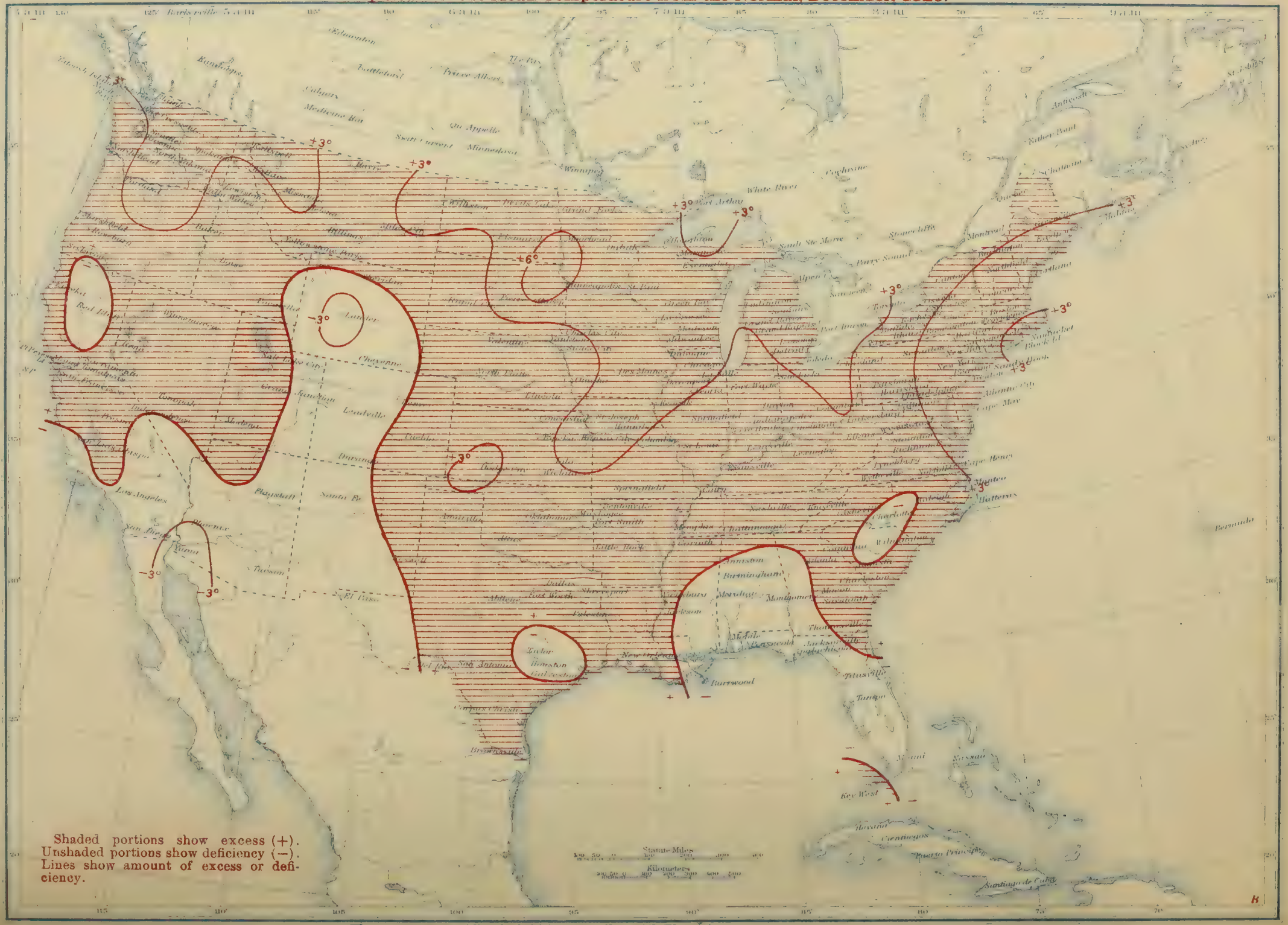
BY

HENRY C. HOWE

METEOROLOGIST

PARKERSBURG, W. VA.
WEATHER BUREAU OFFICE
MARCH 12, 1921

Departure of the Mean Temperature from the Normal, December, 1920.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

VOL. XXVIII. PARKERSBURG, W. VA., DECEMBER, 1920. No. 12.

GENERAL SUMMARY.

December was considerably warmer and drier than usual and was free from low temperature periods. The precipitation was favorably distributed over the State and throughout the month. About one-half of the average December snowfall was received The rivers were at low stages and free from ice. The month was considered exceptionally pleasant for the season and was favorable for winter grains, corn husking, and outdoor work.

PRESSURE.

The mean sea-level pressures at Parkersburg and Elkins were 30.04 and 30.05 inches, respectively. The highest and lowest readings observed were as follows: Parkersburg, 30.47 inches on the 25th, and 29.38 inches on the 14th. Elkins, 30.56 inches on the 21st, and 29.40 inches on the 14th.

TEMPERATURE.

The monthly mean for the State, determined from 51 stations, was 35.6°. The departure from the normal for 44 stations having ten or more years of record was +2.5°. The temperatures were generally above the normal from the 1st to the 15th and on the 22-23d, 27th, and 30th-31st, with the highest readings occurring on the 3d, 4th, 13th, and 14th. The coldest weather was from the 17th to the 21st and on the 24-25th and 28-29th, with the lowest temperatures occurring generally on the 19th, 20th, and 21st in the northern districts and on the 19th, 20th, 25th, and 28-29th in the southern districts.

HUMIDITY.

The averages of the humidity readings at Parkersburg and Elkins at 8 a. m. and 8 p. m., with the normals, were as follows: Parkersburg, 8 a. m., 74 per cent; 8 p. m., 73 per cent. The December averages for the same hours for the past 31 years are 82 and 76 per cent, respectively. Elkins, 8 a. m., 82 per cent; 8 p. m., 75 per cent. The December averages for Elkins for the same hours for the past 20 years are 86 and 80 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, determined from 69 stations, was 2.55 inches. The departure from the normal for 46 stations having ten or more years of record was −0.87 inch. Precipitation was received in practically all districts on the 1st, 5th, 10-11th, 13-19th, 22-23d, and 26-27th, the greatest amounts being recorded on the 14th. Light snow fell in a few of the more elevated localities on the 2d, 5th, and 10th. Snow flurries or light to moderate snow occurred daily in most sections from the 16th to the 19th. Light snow was also received in a few localities from the 24th to the 26th.

WIND.

The average wind velocity at Parkersburg was 7.0 miles per hour, or 0.9 mile above the December average for 30 years. The average at Elkins was 7.2 miles per hour, or 2.5 miles above the December average for 21 years. The highest velocity at Parkersburg was 35 miles per hour from the west on the 15th, and at Elkins 33 miles per hour from the southwest on the 14th.

SUNSHINE AND CLOUDINESS.

At Parkersburg the sunshine averaged 24 per cent of the possible amount, or 3 per cent below the December average for 23 years. The average at Elkins was 26 per cent, or 4 per cent below the December average for 21 years.

MISCELLANEOUS PHENOMENA.

Fogs, dense: Charleston, 3d, 8th, 9th, 12th, and 21st; Elkins, 13th; Hinton, 3d and 31st; Parkersburg, 20th; Terra Alta, 27th.

Halos, lunar: Elkins 21st; Wellsburg, 4th.

Halo, solar: Wellsburg, 3d.

Sleet: Elkins, 10th; Gary, 26th; Lewisburg, 8th; Marlinton, 22d, 26th, and 27th; Miller, 27th; Piedmont, 22d, and 27th.

Winds, high: Bluefield, 14th; Cairo, 5th; Charleston, 14th, Elkins, 14th; Glenville, 16th, 17th, and 18th; Huntington, 15th; Mannington, 14th and 15th; New Cumberland, 14th; Parkersburg, 5th, 14th, 15th, and 23d; Ryan, 14th and 15th; Terra Alta, 15th; Wellsburg, 14th; Weston, 1st, 5th, 14th, and 15th.

COMPARATIVE DATA FOR DECEMBER.

Year.	Temperature.			Precipitation.				Number of days.		
	Mean.	Highest.	Lowest.	Average.	Greatest.	Least.	Snowfall (in inches).	Clear.	Partly Cloudy.	Cloudy.
1891	40.9	75	6	3.27	....	....	....	..	..	..
1892	34.1	72	−10	2.91	....	....	....	..	..	..
1893	37.1	76	7	2.05	3.73	0.56	....	10	8	13
1894	36.3	80	−29	4.04	6.56	1.71	....	11	7	13
1895	36.9	72	− 6	2.87	4.14	1.85	7.1	8	9	14
1896	35.3	67	2	1.68	2.88	0.57	....	12	9	10
1897	37.3	72	− 4	4.00	6.79	2.05	....	6	9	16
1898	33.4	69	−12	2.66	4.23	0.71	7.0	12	8	11
1899	33.3	77	−17	2.81	4.46	1.22	3.9	11	8	12
1900	34.6	66	3	2.26	3.45	1.32	1.0	11	7	13
1901	32.3	75	− 9	5.84	8.97	3.57	3.8	7	8	16
1902	33.9	70	− 2	5.33	9.95	2.01	9.4	5	7	19
1903	26.5	59	−11	2.00	4.43	0.30	7.8	12	8	11
1904	32.8	71	−20	3.12	5.91	1.63	9.8	8	7	16
1905	35.6	70	3	3.11	5.24	1.30	3.4	11	6	14
1906	35.9	70	− 1	4.73	11.15	1.83	6.2	5	6	20
1907	35.5	70	− 2	3.36	9.31	0.70	5.2	9	8	14
1908	36.4	73	5	3.03	7.36	1.06	6.0	9	8	14
1909	28.8	78	−10	2.55	6.00	1.16	10.9	9	8	14
1910	28.4	72	− 8	2.72	6.90	1.00	14.6	7	7	17
1911	39.3	74	4	3.27	5.58	1.25	1.6	9	5	17
1912	35.8	76	− 6	2.88	5.55	1.45	7.1	12	7	12
1913	36.4	68	3	2.82	3.81	1.10	2.9	9	8	14
1914	30.3	70	−20	5.46	8.04	2.58	12.5	7	4	20
1915	32.8	68	0	4.35	7.19	1.35	7.6	5	7	19
1916	32.8	77	−18	3.33	6.38	0.85	10.6	13	7	11
1917	24.3	67	−37	1.51	3.32	0.47	11.8	11	6	14
1918	41.0	74	0	4.41	8.14	2.70	3.2	8	6	17
1919	30.4	72	−15	4.07	7.35	1.17	7.8	10	6	15
1920	35.6	70	0	2.55	5.13	1.32	3.7	6	7	18
Means and extremes ..	34.1	80	−37	3.30	11.15	0.30	6.9	9	7	15

Climatological Data for December, 1920.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Precipitation 0.01 in. or more.	Clear.	Partly cloudy.	Cloudy.		
Panhandle Division.																				
Bayard	Grant	2,700	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John C. Fontz.
Brandywine	Pendleton	.....	4	34.3	.....	60	4†	12	19†	35	2.10	.....	0.70	0	5	16	9	6	n.	Elmer Keister.
Burlington	Mineral	875	26	34.3	+ 3.5	55	14	13	21	31	1.64	−0.98	0.58	T.	3	3	22	6	nw.	J. W. Vandiver.
Harpers Ferry	Jefferson	244	31	.....	.....	.....	.....	.....	.....	.....	2.76	+0.15	0.90	.....	5	.....	.....	.....	w.	S. W. Lightner.
Martinsburg	Berkeley	435	28	36.0	+ 3.4	58	14	17	21	30	2.86	+0.18	1.00	1.2	8	13	8	10	w.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	24	38.4	+ 5.3	62	2	18	24†	29	2.04	−0.22	0.83	T.	5	26	1	4	.....	M. S. Henkel.
Piedmont	Mineral	919	7	34.0	.....	53	14	11	21	24	1.73	.....	0.52	.....	11	7	9	15	se.	C. A. Suter, Jr.
Romney	Hampshire	824	22	35.8	+ 3.5	59	30	12	21	38	1.56	−0.97	0.65	1.0	6	4	14	13	w.	Geo. E. Arnold.
Upper Tract	Pendleton	1,230	21	34.8[d]	+ 1.4	60[c]	3	11[d]	29	36[d]	1.36	−0.89	0.66	.....	3	11	9	11	w.	J. M. Mallow.
Wardensville	Hardy	1,200	2	33.2[n]	.....	52[n]	2	12[n]	22	19[w]	1.47	.....	0.60	T.	5	.....	.....	.....	.....	Luther F. Sutton.
Averages and	extremes	.....	....	35.1	+ 3.4	62	2	11	21†	38	1.95	−0.46	1.00	0.4	6	12	10	9	w.	
Northern Division.																				
Bens Run	Pleasants	622	18	37.2	+ 4.0	65	4	16	21	31	2.09	−1.75	0.65	4.0	10	5	10	13	.....	J. D. Riggs.
Bruceton Mills	Preston	1,549	0	.....	.....	.....	.....	.....	.....	.....	2.83	.....	0.81	6.7	11	.....	.....	.....	.....	W. M. Wolf.
Buckhannon	Upshur	1,411	23	36.4	+ 3.5	67	13	4	19	32	3.60	−0.48	1.00	11.5	8	8	1	22	.....	H. A. Darnall.
Cairo	Ritchie	680	21	35.8	+ 1.7	63	4	10	19†	34	2.42	−1.44	0.67	2.4	13	5	7	19	.....	O. C. Hess.
Cortland	Tucker	3,300	4	.....	.....	.....	.....	.....	.....	.....	3.09	.....	0.75	12.0	9	0	20	11	.....	Samuel Harmon.
Creston	Wirt	701	18	37.9	+ 4.0	65	4	12	19†	36	2.45	−0.93	0.60	1.2	11	2	3	26	w.	J. M. Reed.
Davis	Tucker	3,093	11	.....	.....	.....	.....	.....	.....	.....	5.13	.....	1.13	20.0	14	3	9	19	w.	Ross C. Male.
Elizabeth	Wirt	646	8	.....	.....	.....	.....	.....	.....	.....	1.73	.....	0.47	.....	11	.....	.....	.....	.....	E. D. Ball.
Elkins	Randolph	1,947	19	33.6	+ 1.1	61	4	7	19	36	2.78	−0.64	0.57	8.2	17	2	8	21	w.	U. S. Weather Bureau.
Fairmont	Marion	883	14	34.9	+ 1.8	63	13	13	25	37	2.66	−0.73	0.68	5.0	15	10	2	19	w.	F. P. Hall.
Glenville	Gilmer	738	26	37.2	+ 2.3	70	4	5	19	40	3.30	−0.38	0.80	4.5	14	5	8	18	w.	Howard R. Brannon.
Grafton	Taylor	1,000	27	35.0	+ 1.1	64	4	11	21	35	2.14	−1.50	0.57	T.	7	3	12	16	e.	W. C. Byers.
Lost Creek	Harrison	1,026	22	35.6	+ 1.8	68	4	6	19	37	2.91	−0.51	0.98	4.0	8	7	2	22	w.	Allen Smith.
Mannington	Marion	974	17	35.3	+ 3.0	65	4	7	20	32	2.91	−0.64	0.83	3.9	17	5	7	19	w.	Jas. A. Morgan.
Morgantown[a]	Monongalia	1,250	27	36.4	+ 3.0	65	4	13	21	27	.....	.....	.....	.....	.....	1	4	25	s.	Prof. E. L. Andrews.
Moundsville	Marshall	642	17	36.8	+ 4.0	65	14	11	20†	33	2.92	−0.13	0.60	6.0	9	5	12	14	sw.	G. W. Wright.
New Cumberland	Hancock	987	22	33.4	+ 2.7	61	4	12	20†	38	2.28	−0.36	0.47	0.5	11	9	5	17	n.	M. F. Smith.
New Martinsville	Wetzel	634	26	37.8	+ 3.1	65	4	13	20	32	2.08	−1.46	0.60	T.	8	6	3	22	w.	Wm. Ankrom.
Parkersburg	Wood	638	33	37.8	+ 2.6	62	4	18	28	26	1.68	−1.09	0.59	1.8	17	3	8	20	sw.	U. S. Weather Bureau.
Parsons	Tucker	1,656	20	34.5	+ 3.4	67	4	0	19	40	3.39	−0.42	0.90	13.0	10	4	5	22	.....	J. W. Swisher.
Philippi	Barbour	1,149	23	36.6	+ 3.3	67	4	12	21	33	2.60	−1.35	0.50	7.0	11	3	6	22	w.	Prof. Vernon E. Wood.
Pickens	Randolph	2,697	17	30.9[a]	− 1.2	57[a]	14	6[a]	19	31[a]	3.12	−2.15	0.45	23.0	14	2[b]	9[b]	18[b]	w.	Dr. J. L. Cunningham.
Rowlesburg	Preston	1,375	33	.....	.....	.....	.....	.....	.....	.....	4.01	+0.15	0.93	.....	14	.....	.....	.....	w.	J. F. Pierce.
Saint Marys	Pleasants	577	11	.....	.....	.....	.....	.....	.....	.....	2.12	−1.50	0.70	0.7	12	.....	.....	.....	w.	Wm. Hughes.
Smithfield	Wetzel	835	14	32.8	+ 1.4	64	4	9	20	34	3.99	−0.10	1.06	7.5	16	13	5	13	nw.	G. M. Whisler.
Stony River Dam	Tucker	.....	0	30.0[a]	.....	50[a]	4†	8	22	30[a]	3.48	.....	0.81	15.5	12	3	8	20	w.	A. C. Becker.
Terra Alta	Preston	2,612	19	29.2	− 0.9	56	4	0	21	26	4.47	−1.00	0.97	22.0	15	7	8	16	w.	Dr. C. O. Gorby.
Wellsburg	Brooke	1,225	19	34.4	+ 3.6	62	13	9	20	28	2.25	−0.90	0.52	T.	9	10	5	16	w.	George P. Pfister.
Weston	Lewis	1,026	24	37.2	+ 2.3	69	4	5	19	32	3.46	−0.24	0.84	9.4	15	4	6	21	ne.	Weston State Hospital.
Wheeling	Ohio	645	33	35.2	+ 3.6	62	14	12	20†	36	2.30	−0.69	0.58	4.8	13	6	5	20	w.	Miss M. B. Forsyth.
Averages and	extremes	.....	....	35.1	+ 2.4	70	4	0	19†	40	2.90	−0.84	1.13	7.2	12	5	7	19	w.	
Southern Division.																				
Bancroft	Putnam	574	16	36.8	+ 2.5	65	3	15	29	36	2.20	−1.30	0.63	1.6	14	8	1	22	w.	E. H. Morrow.
Beckley	Raleigh	2,440	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John H. Ewart.
Bluefield[a]	Mercer	2,558	25	37.6	+ 2.5	65	3	15	26	36	3.84	−0.90	1.38	3.5	19	8	11	11	.....	Norfolk & Western Ry.
Camden-on-Gauley	Webster	2,062	5	.....	.....	.....	.....	.....	.....	.....	3.27	.....	1.60	3.0	5	10	0	21	n.	Miss Katie Jarvis.
Charleston	Kanawha	597	17	41.8	+ 2.2	65	3	14	29	35	2.76	−0.57	0.80	T.	8	7	1	23	n.	C. V. Lewis.
Clay	Clay	706	4	.....	.....	.....	.....	.....	.....	.....	2.21	.....	0.98	.....	11	.....	.....	.....	.....	Prof. E. H. Knabenshue.
Cuba	Jackson	650	18	38.2	+ 4.4	64	4	11	20	36	1.65	−1.65	0.60	T	5	8	14	9	w.	Miss Faythe Howard.
Dam 19 O. R.	Wood	557	4	.....	.....	.....	.....	.....	.....	.....	2.06	.....	0.80	T.	12	.....	.....	.....	.....	Lockmaster.
Dam 20 O. R.	Wood	551	4	.....	.....	.....	.....	.....	.....	.....	2.07	.....	0.71	T.	8	.....	.....	.....	.....	Lockmaster.
Dam 22 O. R.	Jackson	538	5	.....	.....	.....	.....	.....	.....	.....	2.73	.....	0.55	.....	7	.....	.....	.....	ne.	Lockmaster.
Dam 26 O. R.	Mason	505	4	.....	.....	.....	.....	.....	.....	.....	1.85	.....	0.62	0.5	9	.....	.....	.....	.....	U. S. Engineer Office.
Evans	Jackson	606	8	38.3	.....	60	3†	20	19†	28	1.62	.....	0.76	T.	6	1	2	28	.....	B. F. Sayre.
Gary	McDowell	1,426	4	34.0[g]	.....	57[e]	12	10[a]	29	27[b]	2.83	.....	0.56	T.	12	4[b]	0[b]	25	.....	U. S. Coal & Coke Co.
Green Sulphur Spgs	Summers	1,600	24	35.0	+ 1.6	59	14	9	29	36	3.76	−1.14	0.95	7.5	11	5	5	21	w.	W. H. Gwinn.
Hinton	..do	1,450	23	36.6	+ 1.8	60	3	16	29	35	2.22	−0.60	0.60	2.5	11	0	0	31	w.	J. B. Lavender, C. E.
Huntington	Cabell	538	26	37.8	+ 3.6	62	13	19	29	30	1.90	−1.57	0.72	0.4	10	6	4	21	w.	L. H. Hutchinson.
Kanawha Falls	Fayette	618	1	.....	.....	.....	.....	.....	.....	.....	1.32	.....	0.40	T.	5	.....	.....	.....	.....	J. O. Brown.
Kayford	Kanawha	1,335	4	.....	.....	.....	.....	.....	.....	.....	2.77	.....	0.58	0.5	14	.....	.....	.....	.....	Cabin Creek Con. Coal Co.
Lewisburg	Greenbrier	2,200	20	33.6	+ 1.4	60	14	7	19	30	2.07	−0.70	0.61	2.0	8	5	7	19	nw.	Geo. T. Argabate.
Logan	Logan	687	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. C. Flanagan.
Madison	Boone	704	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Bradley.
Marlinton	Pocahontas	2,131	21	29.1	0	52	14	0	19	32	4.37	+0.95	1.36	2.5	9	3	16	12	nw.	S. L. Brown.
Miller	Fayette	.....	0	.....	.....	.....	.....	.....	.....	.....	2.73	.....	0.61	T.	8	.....	.....	.....	.....	J. R. Bays.
Point Pleasant	Mason	553	27	38.5	+ 3.4	62	4	12	20	31	1.98	−1.30	0.68	T.	10	9	0	22	.....	W. D. Holmes.
Powellton[b]	Fayette	933	24	40.2	+ 3.8	66	22	7	25	44	1.69	−1.43	0.37	1.5	9	4	14	11	.....	Elkhorn-Piney Coal Co.
Raleigh	Raleigh	2,130	4	.....	.....	.....	.....	.....	.....	.....	2.54	.....	0.49	0.1	12	.....	.....	.....	.....	Raleigh Coal & Coke Co.
Renick	Greenbrier	1,653	4	.....	.....	.....	.....	.....	.....	.....	3.03	.....	1.08	1.0	6	.....	.....	.....	.....	Wm. B. Hill.
Robertsburg	Putnam	574	20	36.4	+ 2.5	62	3†	12	25	33	1.81	−1.73	0.55	0.5	11	5	1	25	.....	E. C. Brace, Jr.
Ryan	Roane	709	17	36.5	+ 2.7	70	14	10	25†	39	1.71	−1.79	0.56	2.4	13	4	4	23	.....	Wm. E. Ryan.
Sharples	Logan	.....	0	.....	.....	.....	.....	.....	.....	.....	2.82	.....	0.85	T.	7	.....	.....	.....	.....	C. E. Rippetoe.
Spencer	Roane	784	16	37.6	+ 3.2	64	3†	16	28	36	2.56	−0.93	0.73	T.	9	0	8	23	.....	A. M. McKown.
Sutton	Braxton	839	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lawrence Freeman.
Union	Monroe	2,250	16	33.9	+ 2.1	67	6	12	28	36	1.54	−1.04	1.00	3.0	4	.....	.....	.....	.....	Edward H. Shanklin.
White Sulphur Springs	Greenbrier	1,940	10	32.4[a]	.....	62[a]	2†	9	18†	37[a]	2.15	.....	0.65	2.5	9	14	3	14	.....	J. M. Ayres.
Williamson	Mingo	660	20	37.2	+ 0.4	62	13	18	29	29	2.52	−1.39	0.64	T.	12	6	10	15	w.	J. F. Keyser.
Averages and	extremes	.....	....	36.4	+ 2.4	70	14	0	19	44	2.41	−1.07	1.60	1.2	9	6	5	20	w.	
State averages and	extremes	.....	....	35.6	+ 2.5	70	4†	0	19†	44	2.56	−0.87	1.60	3.7	10	6	7	18	w.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c] appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

Daily Precipitation for December, 1920.

Stations.	Watersheds.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Panhandle Division.																																	
Bayard	Potomac														.70								*	.65			.10						2.10
Brandywine	do	.65				T.																											
Burlington	do	.53											T.		.53	T.	T.	T.					.58										1.64
Harpers Ferry	do	.90				.32						T.			.85	T.	T.	T.						.62				.07					2.76
Martinsburg	do	1.00				.28				.03				.10	.72	T.	T.	.06	.02				.73				.02						2.86
Moorefield	do	.50												.10	.83		T.						.53					.08					2.04
Piedmont	do	.31	.03			T.		T.			.02			T.	.48	.08	.10	.06	.01				.52	.03				.09					1.73
Romney	do				.12						T.			.05	.65	T.	T.	.09					.05					.60					1.56
Upper Tract	do	.66				T.				T.	T.				.60		T.						.10						T.				1.35
Wardensville	do	.60							T.		T.			.02		.35	.02						T.		.48								1.47
Northern Division.																																	
Bens Run	Ohio	.18				.18					.15					.65	.09	.18	.01		.04			.46				.12					2.09
Bruceton Mills	Monongahela	T.	.55		T.	.18					.14	.07			.81	.09	.27	.14	T.	T.			.18		T.	.11	T.	.29	T.				2.83
Buckhannon	do				T.	T.					1.00		T.	T.	.50	T.	.35	.20	.60				.62	.08		T.		.25	T.				3.60
Cairo		.13	.15			.22					.17			.09	.67	.04	.09	.06	.03	.01			.63		T.	T.	T.	.13					2.42
Cortland	Monongahela	.75	.25											.16		.27	.36	.27	.18				.45					.10					3.09
Creston	Little Kanawha	.60	.07			.20					.15	.10		T.	.50		T.	T.	.06	T.	T.			.60	T.	.02	T.	.10	.05				2.45
Davis	Monongahela	.58	.22			.83					.04	.22			1.13	.18	.27	.22	.36	.04				.70	T.	.13	.21	T.					5.13
Elizabeth	Little Kanawha	.25	.05		.19						.06	.03		.02	.47	.04		.08				.46						.08				1.73
Elkins ***	Monongahela	.15	.08	T.	.03	.27					.25		T.	.19	.15	.15	.37	.24	.14	.05			.49	.08	.03	.05		.09	T.				2.81
Fairmont	do	.46	.23			.12					.03	.12			.52	.06	.10	.12	.04	T.	.02		.02	.66	T.	.02	T.	.10	.04	T.			2.66
Glenville	Little Kanawha	.65	.11			.20					.08	.12		T.	.65	T.	.09	.14	.21		.04			.80		.04		.12	.05				3.30
Grafton	Monongahela	.25	.35			.20					*	.20			.57	T.	T.	T.	T.				.57	T.	T.	T.	T.	T.					2.14
Lost Creek	do		.26			.10					.25		T.	T.	.88	T.	.26	.07	T.	T.	T.		.98	T.	T.	T.	T.	.11	T.				2.91
Mannington	do	.18	.31			.27	.01				.16	.03			.55	.04	.14	.09	.04	.04			.78	.05	.01	.03		.18					2.91
Morgantown	do																																
Moundsville	Ohio	.60	.15								.18				.60		.36	.18					.35	.30			.20					2.92
New Cumberland	do	.47	.36	.01		.10	.02				.01	.06			.40	T.	.04	T		T.	T.			.39			.36					2.28
New Martinsville	do	.30	.20			.03					.20			.05	.60	T.	.25	T.	T.	T.			.45									2.08
Parkersburg ***	Ohio	.12			.04	.03				T.	.12		T.	.25	.34	.02	.07	.07	.03	.01		.02	.39	.02	.01		.07	.07	T.			1.68
Parsons	Monongahela	*					.50			.40					.32	T.	.27	.63	.18	.09			.90				T.	.10	T.				3.39
Philippi	do	.08	.20			.15					.13	.06			.50	.27	.09	.27		T.	T.		.50			T.	T.	T.	.35				2.60
Pickens	do	.11	.18			.37					.18	.09			.10	.18	.27	.45	.18	.18			.25		T.	.18		.40					3.12
Rowlesburg	do	.25	.68			.25	T.				T.	.42		T.	.64	.20	.26	.19	.12	.04	T.		.71		.03		.16	.06				4.01
Saint Marys	Ohio	.35	.18								.10	.04			.70	.05	.05	.02					.05	.40				.12	.06				2.12
Smithfield	Fishing Creek	.55	.27			.28					.09	.12			.62	.04	.20	.20	.08	.08	.08		.15	.91				.26	.06				3.99
Stony River Dam	Monongahela	.53				.15						.09			.73		.18	.81	.18	.09				.50		.04		.09	.09				3.48
Terra Alta	do	.35	.37			.25					.16			.03	.97	.36	.18	.36	.09	.10			.60	.12			.18	.35	T.				4.47
Wellsburg	Ohio	.52	.20			.18					.10			T.	.47	.02	T.	T.					.33	.03				.40					2.25
Weston	Monongahela	.24	.19			.16					.23	.03		.01	.57		.18	.27	.50	.06	.03		.72	.12				.15	T.				3.46
Wheeling	Ohio	.58	.19	T.		.05					.05	.05			.55	.04	.08	.03	.03		T.	T.	.04	.37	T.	T.		.24	T.				2.30
Southern Division.																																	
Bancroft	Great Kanawha	.33	.03			.13					.03	.05		.03	.63		.02	.01			.02			.60		*	.09	.23	T.				2.20
Beckley	do																																
Bluefield	do	.05	.04			.31		.20	.38		.03	.01		.02	1.38	.09	.04	.09	.01	.09	.14		.49				.04	.38	.05			T	3.84
Camden-on-Gauley	do	.20													1.00	T.	T.	.18			.09			1.20	T.	T.							3.29
Charleston	do	.80	.32			.25					.10	.12		T.	.70		T.	T.						.37					.10	T.			2.76
Clay	do	.98	.03			.23					.03				.47		.08	.03	T.		.15		.16			.03	.02	T.	T.				2.21
Cuba	Sand Creek				T.	.15					.30			T.	.60	T.	T.	T.	T.				.45			T.	T.	.15					1.65
Dam 19 O. R.	Ohio	.28	.11			.09					.06	.05		T.	.80	T.	T.	.02	T.	T.	.01		.03	.44	T.			.14	.03				2.06
Dam 20 O. R.	do	.20	.15			.13					.08	.12			.71		T.	T.					.50					.18	T.				2.07
Dam 22 O. R.	do	.30				.25					T.	.50			.55		.51						.50					.12					2.73
Dam 26 O. R.	do	.25				.22					.02	.09	.05		.62		.03						.32					.25					1.85
Evans	Ohio	T.	.18			.20					.20				.76	T.		T.	T.	T.			.07					.21					1.62
Gary	Big Sandy	.15	.13			.23			.40		.30	.05	.06	T.	.56	.08	T.	T.						.46		T.	T.	.18	.23			T.		2.83
Green Sulpr. Spgs.	do	.91							.20		.33			T.	.95	.09	.18	.13	.09				.48	.22		.18							3.76
Hinton	do	.14	.08			.18			.08	.20	T.	T.		T.	.60	.02	.02		.04					.48		T		.38					2.22
Huntington	Ohio	.26	.02			.16					.04	.04		.02	.70		.02	T			T.			.38				.26	T.				1.90
Kanawha Falls	Great Kanawha	.35				.30					T.	.20			.40		T.	T.	T.									.07	T.				1.32
Kayford	do	.40	.15			.58					.17	.11		T.	.52	.05	.05		.04				.38			*	*	.15	.17				2.77
Lewisburg	do					.28				.10	T.			.08	.46	T.	T.	T.					.49	.05			.18	.43					2.07
Logan	Guyandotte																																
Madison	Great Kanawha																																
Marlinton	do	1.20									.12			.16	1.20	T.	.10	.05	T.	T.			1.04	T.	T.	T.	.10	.40					4.37
Miller	Meadow Creek	.32		.13		.38						.31			.61				T.	.14				.60					.24				2.73
Point Pleasant	Ohio					.24					.07	.04		.03	.68					.04			.40				.10	.33	.05				1.98
Powellton	Great Kanawha					.37			.07		.15	.16			.37		T.	.13	T.				.27		T.	.02	.15						1.69
Raleigh	do					.20						.34	.13	.10	.48		.12	.05	.08					.49		.05	.20	.30					2.54
Renick	do	.45				.35				.05					1.08			.10						1.00									3.03
Robertsburg	do	.22	.08			.15					.05	.06		.02	.53		T.	T.			.04		.38		T.		.20	.08					1.81
Ryan	do	.03	.02			.10					.10		T.	T.	.56	T.	.02	.02		.09			.49		.01	.08	.04	.15					1.71
Sharples	Coal River	.45				.58			.38	T.	.01	.07			.48	T.		T.					T.					.85					2.82
Spencer	Little Kanawha	.57	.10								.21	.16		.07	.60							T.	.05	.73	T.	T.		.07					2.56
Sutton	Great Kanawha																																
Union	do								.18						1.60								.27				.09						1.54
White Sulphur Spgs.	do	.40	T.		.20				.30	T.	.20			.65	.20		.09	.09	T.								.02	T.					2.15
Williamson	Big Sandy	.28	.10		T.	.26			.16	.48	.06	T.		.04	.51		T.		T.				.45	.04			.12	.02					2.52

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

*** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

T. Trace, or less than 0.01 inch.

Daily Temperatures for December, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Panhandle Division.																																	
Bayard	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Brandywine	Maximum	47	48	46	60	50	44	48	40	40	44	42	55	56	60	50	40	37	40	39	42	39	40	48	38	32	45	43	37	42	45	42	44.5
	Minimum	35	30	28	30	28	23	22	21	20	18	32	20	38	39	32	20	19	25	12	18	12	25	30	28	18	20	24	19	13	22	26	24.1
Burlington	Maximum	48	46	45	51	53	41	40	35	44	42	41	43	46	55	47	35	38	29	39	35	32	34	48	37	30	34	40	37	46	53	52	41.8
	Minimum	38	41	28	34	38	37	21	24	27	19	33	32	41	33	29	20	26	14	20	16	13	22	32	28	19	19	29	23	15	25	31	26.8
Martinsburg§	Maximum	50	49	49	51	49	45	46	41	37	46	44	42	57	58	45	38	39	34	39	36	35	35	49	36	31	34	41	32	42	47	48	42.7
	Minimum	37	40	33	35	36	39	37	28	28	31	34	25	27	39	39	32	24	27	23	24	17	18	31	30	22	21	26	30	20	23	35	29.4
Moorfield	Maximum	53	62	53	57	56	49	48	45	52	47	47	46	45	55	48	39	36	34	42	43	38	37	47	40	37	41	37	39	50	54	56	46.2
	Minimum	38	40	37	46	40	36	38	25	23	25	34	23	36	43	37	32	26	30	30	24	20	21	24	18	18	20	30	28	25	35	46	30.6
Piedmont	Maximum	48	44	41	52	48	42	44	45	35	41	42	39	44	53	44	42	33	30	34	32	30	33	46	36	29	31	39	34	40	48	46	40.2
	Minimum	37	39	30	39	38	36	32	24	24	27	32	22	36	37	30	29	21	25	16	22	11	24	32	26	19	20	28	22	19	24	38	27.7
Romney	Maximum	47	46	47	48	48	41	42	42	39	43	43	42	46	50	50	41	37	33	43	42	39	45	50	44	44	40	43	44	52	59	55	44.7
	Minimum	38	37	37	37	31	35	31	22	22	23	19	21	35	44	33	28	21	24	16	24	12	25	30	23	19	18	29	24	14	27	35	26.9
Upper Tract	Maximum	47	50	60	59	55	45	..	54	49	46	..	57	56	56	54	41	40	..	37	38	39	39	46	38	36	35	44	45	46	48	50	46.8
	Minimum	35	30	27	27	32	32	..	21	19	18	..	23	20	20	20	28	27	..	23	22	13	..	19	26	19	19	22	23	11	15	24	22.8
Wardensville	Maximum	..	52	..	..	40	40	38	..	43	..	.	38	39	41	39	38	..	..	36	..	32	..	33	..	..	36	32	..	38	36	..	38.3
	Minimum	28	..	28	..	..	31	30	33	..	22	..	..	20	28	33	35	35	..	..	23	..	12	..	29	..	..	30	28	..	30	29	28.0
Northern Division.																																	
Bens Run	Maximum	46	43	60	65	63	40	46	47	50	43	44	45	50	62	57	45	33	34	30	29	34	39	49	54	32	37	42	35	40	50	50	45.0
	Minimum	42	40	29	40	38	34	33	28	24	34	33	32	29	44	45	31	26	27	25	19	16	18	23	31	19	25	33	17	18	25	29	29.3
Buckhannon	Maximum	45	42	58	64	56	45	43	47	47	41	40	54	67	62	47	33	35	30	34	32	44	53	54	35	29	39	45	44	40	47	47	45.1
	Minimum	37	37	28	37	35	34	32	29	22	29	32	27	41	45	28	27	18	23	4	22	12	33	35	25	19	23	33	20	15	25	36	27.8
Cairo	Maximum	46	44	60	63	60	40	45	45	47	44	43	55	60	59	48	36	36	32	30	33	41	46	54	34	29	38	40	34	39	48	48	44.4
	Minimum	42	37	26	35	38	34	28	29	19	30	31	26	43	45	32	29	21	26	10	10	14	31	34	26	13	21	34	18	13	23	27	27.3
Creston	Maximum	46	49	64	65	61	40	48	50	52	43	48	54	60	61	48	37	39	34	31	35	45	50	55	35	32	39	42	35	43	50	49	46.5
	Minimum	42	40	28	37	38	35	28	30	20	32	34	27	46	45	34	30	24	26	12	12	16	39	35	26	22	23	35	20	15	26	31	29.3
Elkins	Maximum	48	37	59	61	46	33	43	48	51	37	39	52	57	60	40	32	37	25	30	31	43	53	54	28	26	40	43	29	40	48	44	42.4
	Minimum	35	29	26	35	33	31	30	30	22	28	24	23	43	40	27	20	24	11	7	11	7	32	28	20	17	19	29	16	13	26	32	24.8
Fairmont§	Maximum	49	40	59	59	39	38	47	44	53	39	44	48	63	49	35	31	32	30	29	37	45	53	40	27	32	43	43	28	41	52	52	42.6
	Minimum	33	39	29	32	39	35	32	27	26	26	34	26	37	45	32	27	21	25	15	16	15	16	35	26	13	20	30	20	18	23	31	27.2
Glenville	Maximum	54	46	65	70	63	40	51	55	55	46	50	55	63	63	49	37	38	32	33	40	40	45	45	36	31	39	48	35	45	53	50	47.5
	Minimum	39	39	25	33	37	34	27	28	19	28	35	25	44	45	34	29	19	25	5	13	13	30	35	26	15	19	33	19	13	22	29	27.0
Grafton	Maximum	48	41	46	64	39	38	47	47	39	39	41	51	51	48	56	34	32	31	32	38	46	50	39	28	38	43	43	29	40	49	48	42.4
	Minimum	40	38	29	33	38	34	31	28	25	26	32	24	37	45	31	26	20	24	12	18	11	33	38	25	12	22	36	20	15	23	29	27.6
Lost Creek	Maximum	45	41	60	68	61	38	44	46	53	51	45	54	61	62	44	33	35	29	32	37	40	40	53	34	33	38	43	33	41	50	50	45.0
	Minimum	41	38	23	34	37	34	30	28	19	25	33	24	43	44	30	27	15	24	6	10	9	27	34	25	7	22	27	20	14	27	35	26.2
Mannington	Maximum	47	44	59	65	60	39	43	42	50	38	43	47	62	60	45	34	31	28	29	33	39	47	53	34	29	38	44	34	41	50	51	43.8
	Minimum	43	38	27	34	37	35	30	27	22	25	34	24	40	44	32	27	18	26	9	7	9	30	34	26	10	23	34	20	17	24	26	26.8
Morgantown	Maximum	49	45	59	65	59	38	39	42	..	40	40	50	63	63	46	33	33	28	28	30	40	53	55	33	28	39	46	34	39	50	50	43.9
	Minimum	40	34	32	49	34	34	33	24	..	32	31	29	49	40	29	25	24	22	18	19	13	30	31	24	16	22	32	18	17	32	36	29.0
New Cumberland	Maximum	46	43	46	61	42	39	41	43	47	39	42	56	48	48	36	34	33	35	28	30	38	55	41	28	28	36	38	24	35	48	45	40.4
	Minimum	30	38	32	37	40	36	31	25	24	24	35	28	35	41	31	27	26	26	20	12	12	17	36	26	15	15	26	14	14	23	24	26.5
New Martinsville	Maximum	50	45	62	65	61	54	47	50	53	42	47	50	63	62	50	37	37	34	30	36	37	50	55	37	33	38	43	37	41	52	52	46.8
	Minimum	31	40	30	40	38	36	32	29	25	32	34	28	42	45	32	29	23	23	17	13	16	32	32	26	18	23	33	18	19	28	26	28.7
Parkersburg	Maximum	47	47	60	62	51	40	46	44	48	42	45	54	61	59	45	34	37	32	31	34	44	53	53	30	30	38	42	27	39	49	49	44.3
	Minimum	41	34	34	51	37	33	34	30	25	37	33	34	50	45	31	29	30	23	21	18	22	41	30	25	21	27	26	18	20	34	36	31.3
Parsons	Maximum	50	40	60	67	66	56	47	54	54	40	46	36	61	62	44	31	31	25	32	33	44	55	55	32	29	40	45	31	43	51	46	45.4
	Minimum	35	35	25	30	31	35	29	20	20	29	28	23	35	39	29	25	11	22	0	15	4	16	31	24	13	16	31	19	12	19	32	23.6
Philippi	Maximum	46	43	58	67	60	38	42	46	50	48	40	54	62	64	46	45	31	30	31	31	45	54	51	39	27	39	47	33	40	47	48	45.2
	Minimum	39	29	32	44	34	32	29	28	25	30	31	30	48	42	29	24	22	21	13	18	12	38	33	22	14	20	32	17	15	29	37	28.0
Pickens	Maximum	49	35	55	45	40	37	42	47	49	35	34	49	55	57	38	28	21	23	28	31	45	51	..	36	39	40	45	28	36	37	43	39.9
	Minimum	33	30	24	25	28	26	24	24	26	26	23	21	40	36	26	18	18	9	6	15	15	21	..	15	18	21	20	16	12	18	24	21.9
Terra Alta	Maximum	39	35	51	56	50	31	33	30	31	34	28	45	49	55	37	28	22	20	26	24	29	35	47	28	20	31	40	27	32	41	40	35.3
	Minimum	35	32	29	43	30	29	25	22	23	25	19	19	38	36	25	21	20	19	15	14	0	23	23	15	10	11	25	15	15	29	35	23.2
Wellsburg	Maximum	45	44	57	60	59	39	41	42	45	39	42	53	62	58	45	34	31	28	28	27	38	47	46	31	26	35	39	34	35	48	44	42.0
	Minimum	40	40	29	39	37	37	29	23	22	25	31	25	36	44	33	25	22	25	17	9	10	33	31	24	15	18	34	16	15	29	22	26.9
Weston	Maximum	47	43	60	69	61	39	44	48	52	45	45	54	62	65	47	35	37	31	32	38	39	42	57	35	29	37	48	35	42	50	48	45.7
	Minimum	42	38	28	39	38	34	32	29	22	30	34	27	45	45	32	28	22	24	5	16	14	30	35	26	19	23	34	20	17	29	37	28.8
Wheeling§	Maximum	45	42	59	61	42	45	45	40	46	40	48	52	62	52	37	35	34	31	30	37	39	52	38	28	30	42	42	29	53	53	53	43.3
	Minimum	34	40	32	39	39	35	32	29	26	26	35	29	35	45	32	28	25	26	20	12	12	18	35	23	17	12	29	14	17	23	23	27.2
Southern Division.																																	
Beckley	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Bluefield	Maximum	44	50	65	55	54	44	42	51	54	44	45	52	57	60	43	36	37	33	39	44	44	44	..	42	38	51	48	33	43	50	43	46.2
	Minimum	35	33	31	41	37	30	32	30	25	33	33	33	30	39	31	24	27	19	25	20	27	31	..	24	25	15	33	20	18	30	37	28.9
Charleston	Maximum	59	55	65	61	59	62	64	59	59	58	54	60	61	58	48	48	45	38	37	41	48	52	55	54	50	47	50	48	49	50	52	53.1
	Minimum	38	40	32	35	33	34	32	33	28	30	32	34	50	42	40	31	30	21	23	23	29	30	27	29	29	30	32	22	14	21	25	30.6
Gary§	Maximum	..	..	..	..	..	39	42	48	42	37	57	52	52	39	33	..	23	39	24	44	46	45	30	29	40	43	35	24	36	48	39.5
	Minimum	39	37	29	30	39	31	31	34	28	28	34	30	36	47	32	28	27	..	18	20	20	23	41	28	17	18	28	34	10	16	23	28.5
Green Sulphur Spgs.	Maximum	45	43	44	45	38	44	58	43	47	40	51	47	55	59	43	38	36	34	37	43	47	45	47	34	35	36	38	40	45	44	50	43.6
	Minimum	34	29	31	29	28	32	29	35	25	29	34	25	40	42	29	28	20	24	10	16	18	30	33	26	18	17	28	23	9	25	20	26.3
Hinton §	Maximum	48	58	60	58	46	45	59	40	45	42	54	45	57	56	44	39	37	40	40	44	45	46	46	31	37	34	40	34	51	51	46	45.7
	Minimum	38	36	31	30	38	34	30	33	27	26	34	27	32	40	35	29	27	24	17	18	20	22	35	28	20	18	23	25	16	17	25	27.6
Huntington §	Maximum	46	55	61	60	45	45	48	48	50	42	50	58	62	52	40	42	37	36	35	38	48	55	38	29	31	39	39	27	42	50	50	45.1
	Minimum	41	39	32	33	42	32	32	31	23	24	33	32	40	46	39	32	33	29	27	22	22	25	38	28	20	20	28	21	19	22	38	30.4
Lewisburg	Maximum	47	49	55	48	48	37	53	45	43	38	45	45	53	60	42	35	35	27	34	39	40	38	45	33	31	32	38	34	39	45	43	41.8
	Minimum	38	34	25	32	36	30	27	30	18	24	31	23	39	42	32	25	19	23	7	16	19	26	33	24	16	14	27	20	9	21	31	25.5
Marlinton	Maximum	44	40	50	48	40	34	46	38	44	34	40	40	48	52	38	34	32	28	32	34	34	36	42	28	26	28	34	26	32	40	42	37.5
	Minimum	32	28	20	30	30	24	22	26	16	28	20	18	34	38	28	20	18	14	0	14	8	18	28	20	16	8	24	10	2	16	32	20.7
Point Pleasant	Maximum	48	52	61	62	60	45	49	49	48	48	49	58	61	59	49	40	40	35	34	35	45	48	53	35	36	38	40	36	40	50	60	47.2
	Minimum	39	39	30	36	38	31	27	27	20	38	33	30	50	44	33	30	31	27	20	12	18	36	32	25	18	24	33	18	18	34	34	29.8
Powellton	Maximum	46	50	61	..	61	53	46	45	42	47	43	54	59	61	50	41	51	36	37	40	46	66	63	63	40	64	..	60	42	43	48	50.3
	Minimum	31	32	41	..	32	35	30	35	27	31	36	30	48	47	36	31	30	30	19	29	36	30	25	19	7	25	..	26	16	25	36	30.2
Robertsburg§	Maximum	47	54	62	60	43	44	48	51	50	44	49	58	62	52	40	43	36	35	33	37	49	55	39	28	32	40	40	27	44	48	50	45.2
	Minimum	37	39	31	32	40	32	28	29	19	20	32	28	38	45	39	31	31	28	19	17	17	22	38	27	12	16	21	19	15	20	31	27.5
Ryan	Maximum	47	50	62	65	61	43	50	48	52	44	48	55	59	70	46	34	34	33	34	38	50	53	46	35	31	38	43	33	43	47	55	46.7
	Minimum	36	38	23	33	38	32	24	24	16	29	28	28	46	44	32	26	26	25	13	15	15	35	35	25	10	17	33	17	10	20	21	26.3
Spencer §	Maximum	45	47	64	64	42	40	47	45	48	41	50	52	63	49	42	38	33	37	32	34	47	51	41	30	43	43	42	42	40	44	50	44.7
	Minimum	37	39	28	30	34	34	37	29	21	38	33	32	40	45	38	26	32	27	24	18	17	34	39	26	19	38	40	16	22	22	34	30.6
Union	Maximum	46	50	52	60	58	67	60	40	50	39	43	45	46	50	45	40	33	32	28	40	40	41	45	29	30	35	37	42	40	38	45	43.4
	Minimum	26	29	36	26	27	31	30	30	15	24	32	34	35	25	32	28	22	21	18	14	18	25	22	19	17	28	23	12	15	16	26	24.4
White Sulphur Spgs.	Maximum	50	62	56	41	42	52	41	45	39	41	42	62	59	44	36	36	34	36	42	33	42	42	42	24	33	31	24	32	46	36	..	41.5
	Minimum	38	25	26	33	31	29	31	18	20	32	24	26	40	34	27	27	24	9	9	15	16	24	23	20	17	17	22	9	9	17	30	23.4
Williamson §	Maximum	44	49	59	48	46	42	47	39	44	41	47	52	62	50	41	42	36	35	38	40	54	47	36	31	31	42	42	26	29	46	46	43.0
	Minimum	42	39	33	34	42	31	33	33	34	34	35	35	41	48	38	31	32	29	24	25	25	26	31	30	22	22	30	24	18	20	26	31.3

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Total Precipitation, Inches, December, 1920.



VWE

UNIVERSITY OF ILLINOIS LIBRARY

MAY 1 1921

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

WEST VIRGINIA SECTION.

HENRY C. HOWE, Meteorologist.

Vol. XXVIII. PARKERSBURG, W. VA., YEAR, 1920. No. 13.

GENERAL SUMMARY.

The year was slightly cooler and drier than usual and free from marked extremes in temperature, with the precipitation favorably distributed. The conditions were exceptionally good for growth and crop yields were bountiful, especially corn and potatoes.

The weather was cool until into March, but the greater part of March was warm. A cool summer was followed by warm weather during September and October, when all crops were thoroughly ripened.

While April was wet, May was dry and favorable for growth. Although the July rainfall was somewhat deficient, the other summer and the early fall months were slightly wetter than usual. October was decidedly dry and especially favorable for harvesting and thrashing.

The season of growth was long, extending in most of the agricultural districts from May 15 to October 30, although killing frosts occurred early in October in the more elevated sections of the State.

The average cloudiness was practically normal. The sunshine at Parkersburg averaged 51 per cent of the possible amount, or 6 per cent above the normal. The average at Elkins was 41 per cent, or 1 per cent below the normal.

The wind movement at Parkersburg was 50,436 miles and at Elkins, 46,542 miles

THE WEATHER BY MONTHS.

JANUARY.—January was cold and slightly wetter than usual, with a moderate snow-cover during the coldest period. A severe sleet storm, generally followed by rain, which froze as it fell, occurred on the 21st-22d, making travel difficult and dangerous However, not much damage resulted to fruit trees and wires. A slight flood occurred in the Little Kanawha River on the 22-23d. Winter grains were in good condition at the close of the month.

FEBRUARY.—February was also somewhat colder than usual and the month was characterized by alternating periods of freezing and thawing weather, without much snow-cover in the western and southern counties. Heavy snow fell over the extreme eastern counties Fruit buds were held back by cold weather. The rivers were exceptionally low.

MARCH.—March was exceptionally pleasant and sunshiny, with precipitation much below the normal. Owing to atmospheric pressure conditions, the month was characterized by brisk to high winds. The ground in most of the agricultural districts was free from snow-cover. Fruit trees were in excellent condition at the close of the month.

APRIL.—April was wet, windy, and decidedly unfavorable for growth and farm work. April was cooler in only five other years of record. Cherry and plum bloom was killed in many localities. Hail storms were frequent and considerable damage was caused by local severe wind storms. Wheat was in fair condition at the close of the month.

MAY.—This month was one of the coolest and driest of May record. Most of the rainfall was received during four two-day periods. Heavy rain in the central Little Kanawha Basin caused

(Continued on page 99.)

Dates on which First and Last Killing Frost Occurred or Minimum Temperature Fell to 32 Degrees.

Station.	Last in Spring.	First in Autumn.	Station.	Last in Spring.	First in Autumn.
Bancroft	April 15	Oct. 30	Moorefield	May 17	Nov. 13
Bayard	May 16	.....	Morgantown	May 15	Oct. 8
Beckley	.....	Oct. 3	Moundsville	May 16	Oct. 30
Bens Run	April 25	Oct. 31	New Cumberland	.....	Nov. 4
Bluefield	May 15	Oct. 3	New Martinsville	May 15	Oct. 30
Brandywine	May 16	Oct. 3	Parkersburg	April 13	Oct. 30
Buckhannon	May 15	Oct. 31	Parsons	May 16	Oct. 3
Burlington	May 16	Oct. 2	Philippi	May 15	Oct. 7
Cairo	.....	Oct. 7	Piedmont	May 16	Oct. 3
Charleston	April 14	Oct. 30	Pickens	May 16	Oct. 3
Creston	May 16	Oct. 2	Point Pleasant	April 14	Oct. 30
Cuba	May 15	Oct. 7	Powellton	May 15	Oct. 30
Elkins	May 16	Oct. 30	Robertsburg	May 16	Oct. 7
Evans	April 13	Oct. 8	Romney	May 16	Oct. 4
Fairmont	May 15	Oct. 29	Ryan	May 15	Oct. 3
Gary	May 15	Oct. 7	Smithfield	May 16	Oct. 30
Glenville	May 16	Oct. 29	Spencer	May 15	Oct. 7
Grafton	May 16	Oct. 7	Stony River Dam	April 15	Oct. 6
Green Sulphur Springs	May 16	.....	Terra Alta	May 16	Oct. 2
Hinton	May 15	Oct. 30	Union	May 15	Oct. 2
Holcomb	May 16	Oct. 3	Upper Tract	May 17	Oct. 3
Huntington	April 14	Oct. 30	Wellsburg	May 16	Oct. 30
Lewisburg	May 15	Oct. 3	Weston	May 15	Oct. 29
Lost Creek	May 16	Oct. 6	Wheeling	May 15	Oct. 29
Mannington	May 15	Oct. 3	White Sulphur Springs	.....	Oct. 2
Marlinton	May 16	.....	Williamson	April 14	Oct. 30
Martinsburg	April 15	Oct. 7			

COMPARATIVE ANNUAL DATA FOR WEST VIRGINIA.

Year	Temperature			Precipitation
	Mean	Highest	Lowest	
1891	52.0	...	....	45.96
1892	52.1	99	−12	38.33
1893	52.0	99	−25	39.82
1894	53.5	103	−29	34.52
1895	51.5	107	−21	32.82
1896	53.6	97	−10	43.49
1897	53.5	103	−18	41.59
1898	54.8	103	−13	47.61
1899	53.2	100	−35	40.97
1900	54.1	104	−11	37.62
1901	52.1	104	−11	44.78
1902	52.8	104	−14	42.19
1903	52.0	105	−19	40.55
1904	50.9	98	−20	33.33
1905	52.3	100	−22	45.53
1906	54.0	101	−11	44.36
1907	51.7	98	−23	52.15
1908	53.7	101	−16	40.47
1909	53.0	101	−10	43.02
1910	52.3	98	−11	38.60
1911	54.6	106	− 5	47.13
1912	51.7	100	−34	43.78
1913	53.9	103	− 4	49.02
1914	52.3	106	−22	39.71
1915	52.8	101	− 8	43.76
1916	52.6	104	−18	44.63
1917	49.9	104	−37	44.33
1918	53.2	110	−27	44 77
1919	54.0	104	−16	47.27
1920	52.0	99	−11	41.73
Means and extremes	52.7	110	−37	42.46

TEMPERATURE AND PRECIPITATION DATA FOR 1920.

Month	Temperature in degrees Fahrenheit				Precipitation in inches				Sky			Prevailing direction of the wind.
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest local amount	Number of rainy days	Clear	Pt. Cloudy	Cloudy	
January	28.7	− 4.0	77	−11	4.12	+0.23	7.26	11	8	6	17	w.
February	31.3	− 1.0	69	− 4	2.71	−0.36	5.49	12	7	5	17	w.
March	42.8	0.0	83	− 5	3.38	−0.51	8.87	9	17	5	9	w.
April	49.7	− 2.0	91	15	4.91	+1.42	7.26	14	8	7	15	w.
May	58.9	− 3.3	95	24	2.76	−1.33	6.97	7	16	6	9	w.
June	67.9	− 0.8	98	36	5.01	+0.52	9.70	12	13	7	10	w.
July	70.1	− 3.0	99	40	4.84	−0.52	8.94	10	16	8	7	w.
August	71.1	− 0.6	95	42	4.25	+0.37	9.28	13	9	10	12	w.
September	66.7	+ 1.0	96	34	3.14	+0 41	5.38	7	16	7	7	w.
October	57.5	+ 2.4	90	21	1.15	−1.86	2.53	4	22	4	5	w.
November	41.6	− 1.3	80	5	3.21	+0.74	5.69	10	9	4	17	w.
December	35.6	+ 2.5	70	0	2.56	−0.87	5.13	10	6	8	18	w.
Annual	51.8	− 0.8	99	−11	42.02	−1.76	9.70	119	147	76	143	w.

CLIMATOLOGICAL DATA FOR THE YEAR 1920

Stations.	Counties.	Elevation, feet.	Temperature (degrees Fahrenheit).						Precipitation (inches).							Number rainy days.	Sky.			Prevailing direction of wind.
			Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month	Least monthly.	Month.	Total snowfall.		Number clear days.	Number partly cloudy days.	Number cloudy days.	
PANHANDLE DIVISION.																				
Bayard	Grant	2,700	19	.....	.....	.....	− 8	Jan. 3	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brandywine	Pendleton	.....	5	50.9	94	July 24	− 3	Jan. 5†	5	33.47	5.97	Aug.	0.45	Oct.	24.0	89	210	60	96	n.
Burlington	Mineral	875	27	50.1	90	June 11†	2	Jan. 4	27	40.73	7.00	Aug.	0.73	Oct.	37.5	74	124	188	54	w.
Harpers Ferry	Jefferson	244	.....	.....	.....	.....	.....	.....	32	35.32	4.99	Aug.	0.40	Jan.	.....	73	.....	.....	.....	w.
Martinsburg	Berkeley	435	29	52.2	95	June 29†	6	Jan. 3†	29	37.79	4.52	June	0.50	Oct.	27.0	98	215	52*	99	e.
Moorefield	Hardy	900	25	55.0	96	June 29†	4	Jan. 5†	25	36.89	6.51	Aug.	0.42	Oct.	.....	96	.....	.....	.....	.....
Piedmont	Mineral	919	5	50.3	90	June 11†	1	Jan. 3†	5	41.21	6.82	Aug.	1.73	Dec.	.....	.....	.....	.....	.....	se.
Romney	Hampshire	824	24	52.0	95	July 23	2	Jan. 3	24	39.75	5.86	Aug.	1.56	Dec.	25.0	106	118	135	113	.....
Upper Tract	Pendleton	1,230	23	.....	93	July 24	1	Jan. 5	23	28.99	7.00	Aug.	0.10	Oct.	.....	75	.....	.....	.....	w.
Wardensville	Hardy	1,200	3	.....	.....	.....	1	Jan. 3†	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Averages and extremes	.....	.....	.....	51.8	96	June 29†	− 8	Jan. 3	.....	36.77	7.00	Aug.	0.10	Oct.	28.4	87	167	109	90	w.
NORTHERN DIVISION.																				
Bens Run	Pleasants	622	20	53.4	92	June 13†	1	Jan. 3	20	40.14	6.22	June	1.19	Oct.	30.0	117	199	79	88	.....
Buckhannon	Upshur	1,411	25	51.0	88	July 24	− 5	Jan. 5	32	51.30	7.10	July	0.96	Oct.	37.5	104	199	44	123	.....
Creston	Wirt	701	20	53.8	93	July 23†	− 5	Jan. 5	20	45.88	6.31	May	1.39	Oct.	16.2	127	153	35	178	sw.
Elizabeth	Wirt	646	.....	.....	.....	.....	.....	.....	10	39.50	5.36	June	1.07	Oct.	.....	111	.....	.....	.....	.....
Elkins	Randolph	1,940	21	49.1	87	July 24	− 3	Jan. 3	21	43.32	5.45	Apr.	1.07	Oct.	51.1	169	73	108	185	w.
Fairmont	Marion	883	16	52.2	95	May 31	− 1	Jan. 5	29	44.21	7.48	Aug.	0.90	Oct.	21.0	146	201	27	138	w.
Glenville	Gilmer	738	28	54.6	96	Sept. 28	− 6	Jan. 5	34	48.20	6.97	May	1.27	Oct.	20.1	132	185	87	94	w.
Grafton	Taylor	1,000	28	.....	93	May 31†	− 5	Jan. 5	28	38.11	5.97	Apr.	0.77	Oct.	.....	120	.....	.....	.....	e.
Lost Creek	Harrison	1,026	24	52.0	91	Sept. 27	− 8	Jan. 5	24	39.21	4.67	July	0.80	Oct.	17.8	105	164	53	149	w.
Mannington	Marion	974	19	50.7	88	June 13	− 7	Jan. 5	19	46.45	7.74	July	1.08	Oct.	32.5	170	134	76	156	w.
Morgantown	Monongalia	1,250	29	51.8	91	Aug. 8	1	Jan. 4	48	.....	6.71	Aug.	0.12	Oct.	.....	.....	.....	.....	.....	.....
Moundsville	Marshall	642	19	52.3	93	June 11†	1	Jan. 4	19	35.55	6.36	July	1.73	Oct.	25.8	106	93	157	116	w.
New Cumberland	Hancock	987	24	.....	.....	.....	− 4	Jan. 5	24	.....	.....	.....	.....	.....	25.5	.....	.....	.....	.....	.....
New Martinsville	Wetzel	634	28	52.9	92	June 12†	− 2	Jan. 3†	28	41.96	7.15	July	1.40	Oct.	.....	94	180	48	138	s.
Parkersburg	Wood	638	33	53.5	92	July 23	1	Jan. 5	33	37.93	6.38	Apr.	1.40	Oct.	11.6	144	114	94	158	se.
Parsons	Tucker	1,656	22	49.5	91	June 12	− 5	Jan. 4†	22	.....	8.94	July	0.80	Oct.	38.0	.....	.....	.....	.....	.....
Philippi	Barbour	1,149	25	52.1	89	Apr. 25†	− 4	Jan. 3†	25	44.32	5.86	July	0.88	Oct.	.....	137	146	80	140	w.
Pickens	Randolph	2,697	19	48.2	89	July 24	−11	Jan. 3	19	60.40	8.42	Aug.	1.92	Oct.	129.0	145	.....	.....	.....	w.
Rowlesburg	Preston	1,375	.....	.....	.....	.....	.....	.....	35	51.17	6.48	June	1.91	Oct.	.....	150	.....	.....	.....	w.
Saint Marys	Pleasants	577	.....	.....	.....	.....	.....	.....	13	40.55	5.65	June	1.20	Oct.	14.1	127	.....	.....	.....	w.
Smithfield	Wetzel	835	16	49.4	90	June 11†	− 5	Jan. 5	16	48.16	8.90	July	1.30	Oct.	31.5	158	217	64	85	sw.
Stony River Dam	Tucker	.....	.....	.....	88	July 7	0	Jan. 2	.....	46.28	9.28	Aug.	1.47	Oct.	55.1	130	81	82*	203	w.
Terra Alta	Preston	2,612	21	46.6	87	June 10†	− 4	Jan. 4†	21	.....	8.30	July	1.67	Oct.	.....	.....	.....	.....	.....	w.
Wellsburg	Brooke	1,225	21	50.5	92	June 10	− 6	Jan. 4	30	42.99	9.70	June	1.32	May	12.5	128	174	70	122	w.
Weston	Lewis	1,026	26	52.7	89	July 23†	− 4	Jan. 3†	33	46.31	5.58	Apr.	0.98	Oct.	36.7	159	101	128	137	ne.
Wheeling	Ohio	645	35	52.7	96	June 10†	0	Jan. 3	37	33.51	4.47	June	1.77	Oct.	21.0	141	142	84	140	w.
Averages and extremes	.....	.....	.....	51.4	96	June 10†	−11	Jan. 3	.....	43.88	9.70	June	0.12	Oct.	33.0	133	150	78	138	w.
SOUTHERN DIVISION.																				
Bancroft	Putnam	574	17	52.7	91	July 23	0	Jan. 3†	17	37.20	5.62	Jan.	1.22	Oct.	20.3	138	169	13	184	s.
Beckley	Raleigh	2,440	21	.....	90	July 24	.....	.....	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bluefield	Mercer	2,558	26	51.8	87	July 24	− 2	Jan. 3	26	48.29	8.39	Aug.	0.44	Oct.	36.6	162	.....	.....	.....	.....
Camden-on-Gauley	Webster	2,062	.....	.....	.....	.....	.....	.....	4	55.17	7.24	Jan.	1.02	Oct.	44.0	102	128	7	231	s.
Charleston	Kanawha	597	18	56.9	99	July 23†	0	Jan. 5†	35	51.25	7.23	June	1.40	Oct.	5.2	111	150	21	195	w.
Clay	Clay	706	5	.....	.....	.....	.....	.....	5	37.98	4.94	Jan.	1.32	Oct.	.....	113	.....	.....	.....	.....
Cuba	Jackson	650	19	53.2	91	July 23	− 4	Jan. 5	19	35.14	5.52	Apr.	0.85	Oct.	10.0	107	109	170	87	w.
Dam 19 O. R	Wood	557	.....	.....	.....	.....	.....	.....	4	40.19	6.84	Apr.	1.83	Nov.	10.0	130	.....	.....	.....	.....
Dam 20 O. R	Wood	551	.....	.....	.....	.....	.....	.....	3	42.88	5.34	June	1.91	Nov.	.....	115	.....	.....	.....	.....
Dam 22 O. R	Jackson	538	.....	.....	.....	.....	.....	.....	5	38.00	5.21	July	1.61	Oct.	.....	108	.....	.....	.....	.....
Dam 26 O. R	Mason	505	.....	.....	.....	.....	.....	.....	4	37.22	6.58	July	0.49	Oct.	.....	98	.....	.....	.....	.....
Evans	Jackson	606	7	53.6	90	July 24	− 3	Jan. 5	7	38.58	6.36	Apr.	0.77	Oct.	9.5	110	130	41	195	.....
Gary	McDowell	1,426	.....	.....	93	July 24	.....	.....	3	45.85	6.29	Aug.	0.58	Oct.	.....	137	.....	.....	.....	.....
Green Sulphur Springs	Summers	1,600	25	.....	91	July 24	.....	.....	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hinton	Summers	1,450	24	52.0	90	July 24	1	Jan. 3	32	44.48	6.58	Aug.	0.46	Oct.	6.0	137	106	8	252	n.
Holcomb	Nicholas	2,042	9	.....	89	July 24	− 9	Jan. 3	9	.....	6.28	June	1.45	Oct.	.....	.....	.....	.....	.....	.....
Huntington	Cabell	538	25	54.6	96	July 23	4	Jan. 3†	26	37.10	5.78	Apr.	1.08	Oct.	14.1	131	161	31	174	w.
Kanawha Falls	Fayette	618	.....	.....	.....	.....	.....	.....	4	38.87	5.74	June	1.32	Dec.	4.0	77	.....	.....	.....	.....
Kayford	Kanawha	1,335	.....	.....	.....	.....	.....	.....	4	49.10	7.62	June	1.42	Oct.	.....	141	.....	.....	.....	.....
Lewisburg	Greenbrier	2,200	21	50.2	88	July 24	− 3	Jan. 3	21	41.62	5.61	Apr.	0.34	Oct.	15.0	120	136	84	146	nw.
Marlinton	Pocahontas	2,131	22	.....	84	July 24	− 6	Jan. 3	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	sw.
Point Pleasant	Mason	553	28	54.7	95	Sept. 21	1	Jan. 5	28	38.99	6.22	Apr.	1.25	Oct.	7.0	122	129	58	179	.....
Powellton	Fayette	993	.....	.....	99	July 24	2	Jan. 5	26	42.02	5.86	Jan.	0.90	Oct.	19.3	.....	.....	.....	.....	.....
Raleigh	Raleigh	2,130	.....	.....	.....	.....	.....	.....	4	.....	5.01	Mar.	1.47	Oct.	.....	.....	.....	.....	.....	.....
Renick	Greenbrier	1,653	.....	.....	.....	.....	.....	.....	5	38.95	5.19	June	0.35	Oct.	.....	69	.....	.....	.....	.....
Robertsburg	Putnam	574	21	53.0	93	July 23†	− 4	Jan. 5†	21	31.86	5.04	Jan.	0.71	Oct.	10.5	108	.....	.....	.....	.....
Ryan	Ryan	700	18	52.1	91	July 23†	− 9	Jan. 5	18	42.59	5.62	July	1.27	Oct.	26.2	162	139	72	155	.....
Sharples	Logan	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	1.54	Oct.	.....	.....	.....	.....	.....	.....
Spencer	Roane	784	16	52.5	95	July 23	− 3	Jan. 3	22	38.57	5.41	Apr.	1.15	Oct.	.....	97	96	151	119*	.....
Union	Monroe	2,250	17	51.5	90	July 24	0	Jan. 3	17	36.48	6.10	June	0.25	Oct.	.....	86	.....	.....	.....	.....
White Sulphur Springs	Greenbrier	1,940	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.50	Oct.	.....	.....	.....	.....	.....	.....
Williamson	Mingo	660	21	53.6	90	July 24	3	Jan. 6	21	40.92	6.33	Jan.	1.60	Oct.	.....	132	171	69	126	w.
Averages and extremes	.....	.....	.....	53.0	99	July 23†	− 9	Jan. 3†	.....	41.17	8.39	Aug.	0.25	Oct.	15.8	117	135	61	170	w.
State averages and extremes	.....	.....	.....	52.0	99	July 23†	−11	Jan. 3	.....	41.62	9.70	June	0.10	Oct.	25.7	120	147	75	144	w.

* 1 day interpolated from nearby stations.

† And other dates.

Monthly and Annual Mean Temperatures for the Year 1920, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September		October.		November		December.		Annual.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
PANHANDLE DIVISION																										
Bayard	24.4[e]	−3.8	.....	.....	38.4	+0.8	43.3	+1.4	50.8	−6.4	63.0	−0.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brandywine	31.1	.....	30.9	.....	42.4	.....	50.0	.....	56.0	.....	66.0	.....	68.8	.....	70.5	.....	64.6	.....	55.9	.....	40.2	.....	34.3	.....	50.9	.....
Burlington	25.6	−5.2	29.6	−0.7	42.3	+1.2	47.2	−3.5	56.5	−5.0	66.5	−1.8	68.6	−4.1	70.0	+1.0	63.7	−0.6	56.0	+2.2	41.4	−0.7	34.3	+3.5	50.1	−1.1
Martinsburg	25.6	−5.1	28.8	−1.3	43.2	+2.0	49.8	−1.7	59.2	−3.2	70.4	−0.2	73 4	−2.0	72.9	−0.1	66.0	−0.1	58.3	+3.9	42.8	+0.1	36.0	+3.4	52.2	−0.4
Moorefield	29.6[a]	−2.5	33.7	+1.6	45.6[b]	+1.8	52.9	−1.9	60.7	−2.7	69.6	+0.1	76.2	+2.1	75.7	+2.5	69.5	+2.9	62.2	+6.9	45.4[a]	+1.8	38.4	+5.3	55.0	+1.5
Piedmont	25.8	.....	29.4	.....	42.8	.....	47.6	.....	56.2	.....	66.9	.....	69.3	.....	68.8[i]	.....	64.8	.....	57.2	.....	40.4	.....	34.0	.....	50.3	.....
Romney	27.0	−4.0	31.2	−0.9	45.0	+2.5	51.8	+0.3	59.3[b]	−4.0	69.2	−0.8	71.4	−3.6	71.2	−1.8	64.0	−2.2	56.0	+0.8	42.0	−0.7	35.8	+3.5	52.0	−0.9
Upper Tract	26.3	−7.4	30.4	−2.0	37.6	−5.5	43.8[b]	−7.6	54.7	−6.1	.....	.....	69.0	−3.1	69.2[a]	−0.8	64.6[b]	−0.9	56.1[e]	+0.6	41.8[b]	−1.7	34.8[d]	+1.4	.....	.....
Wardensville	29.1	.....	32.0	.....	43.9	.....	.....	.....	.....	.....	61.8[f]	.....	64.1[j]	.....	.....	.....	.....	.....	.....	.....	.....	.....	33.2[n]	.....	.....	.....
NORTHERN DIVISION																										
Bens Run	28.2	−4.1	32.4	+0.6	44.8	+1.6	50.6	−1.7	61.6	−1.8	70.0	−0.3	71.2	−3.9	73.0	−0.9	69.2	+2.6	60.1	+3.4	42.7	−0.6	37.2	+4.0	53.4	−0.1
Buckhannon	30.0	−1.7	30.8	−0.7	41.8	+0.2	51.1	0	58.6	−3.4	66.9	−1.4	69.1	−3.0	69.7	−0.6	64.8	+0.8	53.1	−0.3	39.8	−1.7	36.4	+3.5	51.0	−0.7
Cairo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71.3	−1.6	67.6	−0.4	56.4	−0.5	41.2	−1.5	35.8	+1.7	.....	.....
Creston	30.1	−3.5	33.2	+0.5	44.2	+0.3	52.0	−0.1	61.2	−2.4	70.2	−0.4	72.5	−2.2	73.4	0	69.0	+1.9	58.6	+2.9	43.2	−0.5	37.9	+4.0	53.8	0
Elkins	28.2	−0.8	28.8	−2.8	40.3	+1.2	47.2	−1.5	56.0	−3.1	64.2	−2.4	66.4	−4.1	68.1	−0.3	63.4	+1.5	53.7	+2.3	39.3	−0.3	33.6	+1.1	49.1	−0.8
Fairmont	26.6	−6.6	30.2	−2.1	42.6	+0.9	49.8	−2.1	60.6	−1.9	69.6	−0.7	71.2	−3.2	73.4	+0.3	68.2	+1.7	58.3	+3.0	41.1	−1.4	34.9	+1.8	52.2	−0.9
Glenville	30.4	−2.8	33.6	+0.9	46.0	+1.8	52.8	−0.6	61.6	−1.9	70.8	0	73.8	−1.2	75.2	+3.7	71.0	+3.4	59.4	+3.6	43.4	−0.2	37.2	+2.3	54.6	+0.8
Grafton	28.2	−4.4	31.4	−0.2	.....	.....	51.6[g]	0	58.9[i]	−3.3	68.9	−0.4	70.0	−2.9	72.4[a]	+0.7	67 6	+1.3	56.9[a]	+0.3	40.4	−2.5	35.0	+1.1	.....	.....
Lost Creek	30.2	−2.6	32.4	+1.4	43.2	+0.5	50.6	+0.4	58.6	−2.6	68.0	+0.2	69.4	−2.9	71.2	+0.2	66.7	+1.9	56.8	+2.1	41.3	−1.0	35.6	+1.8	52.0	0
Mannington	27.2	−4.2	30.9	−0.1	43.1	+0.2	49.0	−2.2	57.5	−3.7	66.6	−1.5	68.0	−4.3	69.6	−1.4	64.6	−0.1	55.5	+1.3	41.2	−0.1	35.3	+3.0	50.7	−1.1
Morgantown	26.2	−5.9	28.7[a]	−2.7	38.7[c]	−3.5	50.0[d]	−1.3	60.7	−1.8	68.6	−0.6	70.4	−3.2	71.9[a]	−0.4	68.3	+1.1	60.0[c]	+4.7	41.6[c]	−1.8	36.4[a]	+3.0	51.8	−1.0
Moundsville	24.8[a]	−7.5	32.0[a]	+0.5	44.8	+1.8	47.6	−4.4	59.9	−3.4	69.0	−0.8	70.2	−4.2	73.0	+0.2	67.4	+0.5	58.9	+3.2	43.2	0	36.8	+4.0	52.3	−0.8
New Cumberland	22.6	−5.8	27.6	−0.1	41.6	+1.7	47.0[a]	−2.9	.....	.....	.....	.....	.....	.....	70.3	−0.6	65.5	+3.4	58.7	+4.0	40.7	−0.6	33.4	+2.7	.....	.....
New Martinsville	27.2	−5.6	31.8	−0.4	44.6	−1.1	49.6	−3.6	60 4	−3.2	68.6	−2.9	70.2	−5.3	72.0	−2.2	69.1	+0.8	60.1	+3.2	43.6	−0.9	37.8	+3.1	52.9	−1.5
Parkersburg	28.4	−3.0	32.1	−1.9	45.2	+3.1	50.6	−2.4	61.4	−1.8	70.2	−1.3	72.0	−3.6	72.9	−0.4	68.8	+2.8	59.8	+5.2	43.0	−0.2	37.8	+2.6	53.5	−0.1
Parsons	27.4	−4.0	29.6	−0.1	39.9	0	47.0	−1.8	55.5	−3.7	65.6	−0.5	68.3[e]	−1.9	69.4[a]	+0.2	63.8	+1.0	54.3[a]	+1.3	38.8	−2.2	34.5	+3.4	49.5	−0.7
Philippi	29.0	−4.3	30.5	−0.7	43.6	+1.2	49.6	−1.7	59.2	−2.6	67.1	−1.3	69.4	−3.1	71.0	−0.7	67.3	+2.1	58.8	+4.5	42.8	−0.3	36.6	+3.3	52.1	−0.3
Pickens	27.8	−3.6	27.2	−4.6	39.8[c]	+0.1	45.4	−2.9	55.8	−3.2	63.6[a]	−1.6	66.3[a]	−2.4	66.7	−0.2	63.8e	+2.3	54.0[a]	+2.8	37.4	−3.2	30.9[a]	−1.2	48.2	−1.5
Smithfield	22.8	−8.4	29.4	−1.3	40.6	−1.1	47.9	−3.3	58.4	−2.4	66.8	−1.2	68.4	−4.0	68.2	−3.0	63.5	−0.9	55.2	+1.7	39.0	−2.2	32.8	+1.4	49.4	−2.1
Stony River Dam	28.4	.....	.....	.....	41.2[a]	.....	49.2[a]	.....	56.9[a]	.....	66.2[a]	.....	69.0[a]	.....	67.2[a]	.....	64.4[a]	.....	59.6[a]	.....	44.3[a]	.....	30.0[a]	.....	.....	.....
Terra Alta	24.0	−4.0	25.1[h]	−2.8	37.9[a]	−1.1	44.2	−3.1	54.5	−4.7	62.2	−1.1	64.7[b]	−4.6	66.2	−1.8	61.8	−0.5	53.2	+1.3	36.8	−3.9	29.2	−0.9	46.6	−2.3
Wellsburg	24.1	−5.9	29.4	+2.0	42.2	+3.1	47.6	−1.5	57.4	−3.2	68.2	−0.7	70.0	−1.9	70.8	+0.4	65.0	+0.8	56.4	+2.4	40.4	−0.9	34.4	+3.6	50.5	−0.2
Weston	28.6	−5.0	32.2	+0.3	44.6	+0.8	51.6	−1.0	60.0	−3.2	68.1	−1.7	69.9	−4.6	71.6	−1.5	67.8	+1.1	58.0	+2.2	42.6	−0.7	37.2	+2.3	52.7	−0.9
Wheeling	25.4	−5.7	29.8	−0.1	43.1	+2.1	48.8	−3.6	61.2	−1.8	70.9	0	72.4	−2.7	73.4	0	69.4	+3.2	60.6	+5.4	41.8	−0.3	35.2	+3.6	52.7	0
SOUTHERN DIVISION																										
Bancroft	31.8	−2.8	32.0	−1.8	42.9	−1.7	50.8	−2.9	60.2	−3.7	69.0	−2.0	70.7	−4.4	71.5	−2.3	68.0	−0.3	57.8	+0.5	40.4	−4.4	36.8	+2.5	52.7	−1.9
Beckley	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67.8	+0.6	69.8	−1.5	70.4	+0.5	64.4[i]	+1.0	56.7[c]	+1.5	.....	.....	.....	.....	.....	.....
Bluefield	33.6	−0.9	30.4[b]	−3.6	43.2	−1.2	50.6	−2.7	57.0[b]	−5.1	67.0	−1.9	69.4	−2.2	68.1	−3.0	65.6	−0.1	56.6	+0.7	43.0	−1.5	37.6[a]	+2.5	51.8	−1.6
Charleston	36.4	−2.4	36.2	−2.3	44.6	−4.4	52.8	−4.0	62.8	−3.3	76.0	+3.0	76.6	+0.1	74.0	−1.7	70.9	+0.8	63.0	+3.9	47.6	−0.6	41.8	+2.2	56.9	−0.7
Cuba	29.6[e]	−3.9	33.6	+0.8	45.6	−1.4	51.1	−1.7	60.2	−3.3	68.4	−0.8	70.2	−3.3	71.4	−0.8	67.9	+1.6	59.0	+2.9	43.5	−0.3	38.2	+4.4	53.2	−0.5
Evans	30.6	.....	34.0	.....	44.6	.....	52.6	.....	60.8	.....	70.2	.....	71.0	.....	72.5	.....	68.4	.....	57.8	.....	42.4	.....	38.3	.....	53.6	.....
Gary	.....	.....	32.7[h]	.....	42.2[a]	.....	51.5[a]	.....	59.0	.....	67.2	.....	71.6[c]	.....	71.6	.....	68.2	.....	58.6[b]	.....	.....	.....	34.0[g]	.....	.....	.....
Green Sulphur Springs	33.9[k]	.....	32.1	−0.3	43.2	−0.2	50.4	−0.5	58.5	−3.0	66.9	−1.7	70.8	−1.7	.....	.....	.....	.....	.....	.....	.....	.....	35.0	+1.6	.....	.....
Hinton	32.0	−2.3	30.7[a]	−3.4	42.6	−1.7	49.6	−3.5	59.6	−4.4	67.2[a]	−3.4	70.6	−4.2	70.2	−2.7	67.4	−1.2	57.4	+0.9	40.8	−3.3	36.6	+1.8	52.0	−2.3
Holcomb	30.0	.....	30.2	.....	40.7	.....	48.4	.....	57.0	.....	64.0	.....	67.0	.....	68.4	.....	64.4	.....	54.4	.....	39.0	.....	.....	.....	.....	.....
Huntington	30.2	−2.7	33.4	+0.9	45.4	+0.8	52.7	−1.3	63.6	−1.3	72.2	−0.5	74.4	−2.3	74.8	0	70.1	+2.0	59.3	+3.5	41.9	−2.2	37.8	+3.6	54.6	0
Lewisburg	29.8	−2.2	30.4	−1.6	40.6	−2.0	48.8	−1.4	57.3	−3.5	64.8	−2.5	67.8	−3.3	69.2	+0.7	65.0	−1.0	54.1	+0.5	41.2	−0.3	33.6	+1.4	50.2	−1.3
Logan	.....	.....	35.3	−4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marlinton	25.2	−3.0	26.4	−2.8	34.8	−3.9	43.6	−2.4	52.6	−5.7	60.4	−4.6	62.3	−7.1	64.0	−3.4	.....	.....	.....	.....	.....	.....	29.1	0	.....	.....
Point Pleasant	30.0	−3.7	34.2	+0.7	46 8	+1.5	52.9	−2.0	62.2	−3.1	71.3	−1.2	72.8	−3.7	73.6	−1.0	70.6	+1.5	59.9	+2.4	43.8	−1.2	38.5	+3.4	54.7	−0.5
Powellton	34.0	−3.0	35.2[a]	−0.2	45.0[a]	−0.7	54.7	+0.2	62.0	−2.0	69.0[i]	−1.7	71.8[g]	−2.5	72.1[c]	−0.8	.....	.....	58.3[i]	+2.6	42.6[d]	−2.2	40.2[d]	+3.8	.....	.....
Robertsburg	28.4	−5.3	32.8[a]	−0.1	42.4[a]	−2.4	50.2	−2.9	61.6[a]	−2.4	69.9	−1.5	72.4	−3.1	73.3	−1.2	68.9	+0.9	59.3[a]	+2.0	41.0	−2.4	36.4	+2.5	53.0	−1.3
Ryan	29.4	−4.1	31.6	−1.7	42.4	−1.6	51.0	−1.5	58.9	−3.5	68.0	−1.2	69.7	−3.8	71.8	−0.5	68.0	+1.8	57.0	+2.3	41.0	−2.1	36.5	+2.7	52.1	−1.1
Spencer	28.8	−5.1	31.1	−2.8	43.3	−0.4	50.4	−2.1	60.8[a]	−1.9	70.4	+0 5	71.3[a]	−2.5	73.3	+0.7	67.0[a]	+1.1	56.4	+1.3	39.8	−3.8	37.6	+3.2	52.5	−1.0
Union	30.4	−2.3	31.4	−1.8	41.6	−1.5	50.2	−0.4	58.4	−2.5	66.8	−0.2	69.8	−1.3	70.5	−0.1	66.6	+1.6	57.0	+3.0	41.8	+0.8	33.9	+2.1	51.5	−0.2
White Sulphur Springs	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.4[a]	.....	65.2[a]	.....	55.0[a]	.....	40.0	.....	32.4[a]	.....	.....	.....
Williamson	33.4	−2.6	34.4	−1.8	42.9	−4.1	51.4	−3.8	61.5	−4.1	70.4	−2.1	72.2	−3.5	72.0	−3.0	68.6	+0.8	57.5	+1.0	41.4[a]	−4.0	37.2	+0.4	53.6	−2.2

Reference letters indicate number of days missing; [a] one day, [b] two days, etc.

THE WEATHER BY MONTHS.

(Continued from page 97.)

a moderate flood at Glenville. Heavy to killing frosts on the 15th caused considerable damage to early potatoes and slight damage to fruit and wheat. The soil was too cold for germination and growth.

JUNE.—June was cool and wet, being characterized by frequent and quite favorable distributed showers. Owing to wet soil planting and cultivation were much delayed. Low bottom lands were flooded on the 19-20th, resulting in considerable damage to crops. At the close of the month corn was ten days late and wheat was generally short and thin and nearly ready to harvest. Pastures and meadows were good.

JULY.—This was the coolest July since 1891. There were only three or four uncomfortably warm days, while fires were needed for comfort during several evenings. The rainfall distribution over the State was unfavorable and local storms caused considerable damage to corps. Wheat was harvested under favorable conditions.

AUGUST.—August was slightly cooler and somewhat wetter than usual, with the precipitation unfavorably distributed over the State. The temperatures were nearly the same from day to day and higher temperatures were recorded at most stations during every other August of record. Farm work was again retarded by frequent rains and shocked grains were somewhat damaged by wet weather.

SEPTEMBER.—September was somewhat warmer and wetter than usual and free from abnormally cool and wet periods. Corn ripened rapidly from the 16th to the 23d and the crop was safe at close of the month. There was practically no damage from frosts.

OCTOBER.—October was exceptionally dry, sunshiny, and moderately warm. One of the longest dry periods of State record

(Continued on page 100.)

Monthly and Annual Precipitation for the Year 1920, with Departures from Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September		October.		November.		December		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
PANHANDLE DIVISION.																										
Bayard	3.02	−2.11	.....	.....	3.47	−0.04	4.46	+0.60	1.57	−2.80	4.65	−0.19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brandywine	2.05	.....	2.63	.....	2.70	.....	3.33	.....	1.59	.....	4.10	.....	3.50	.....	5.97	.....	1.90	.....	0.45	.....	3.15	.....	2.10	.....	33.47	.....
Burlington	2.79	+0.15	2.40	+0.01	2.75	−0.32	5.16	+2.19	1.08	−3.03	5.55	+1.31	3.86	−0.07	7.00	+3.08	4.76	+1.70	0.73	−1.75	3.01	+1.45	1.64	−0.98	40.73	+3.74
Harpers Ferry	0.40	−2.43	2.47	−0.02	1.40	−1.70	4.30	+1.28	1.85	−1.79	3.80	−0.02	4.54	+0.98	4.99	+1.21	3.69	+0.91	0.60	−2.30	4.52	+2.29	2.76	+0.15	35.32	−1.44
Martinsburg	2.62	+0.04	3.26	−0.15	3.17	−0.06	4.39	+1.29	2.68	−1.05	4.52	+0.16	2.93	−0.96	3.68	−0.20	3.45	+0.59	0.50	−2.30	3.73	+1.63	2.86	+0.18	37.79	−0.88
Moorefield	1.96	+0.64	3.42	+1.13	2.47	−0.23	4.37	+1.44	1.83	−1.76	5.15	+1.02	3.58	+0.19	6.51	+3.45	2.31	−0.21	0.42	−1.85	2.83	+1.29	2.04	−0.22	36.89	+4.89
Piedmont	2.78	.....	3.06	.....	2.05	.....	4.92	.....	2.38	.....	6.07	.....	3.81	.....	6.82	.....	2.49	.....	2.08	.....	3.02	.....	1.73	.....	41.21	.....
Romney	2.62	−0.11	3.02	+0.80	2.35	−0.79	4.65	+1.70	2.92	−0.76	5.08	+1.00	2.91	−0.66	5.86	+2.01	3.25	+0.82	1.68	−0.86	3.85	+1.93	1.56	−0.97	39.75	+4.11
Upper Tract	1.30	−1.31	1.85	+0.17	2.30	−0.25	2.16	−0.33	1.35	−1.92	4.40	+0.22	2.75	−1.10	7.00	+3.40	2.65	+0.34	0.10	−2.19	1.77	+0.25	1.36	−0.89	28.99	−3.61
Wardensville	1.01	.....	1.64	.....	2.31	.....	.....	.....	1.47	.....	3.75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.47	.....	.....	.....
NORTHERN DIVISION.																										
Bens Run	3.68	−0.77	2.76	−0.45	2.85	−1.36	4.42	+0.36	2.82	−2.82	6.22	+1.78	5.70	+1.21	3.16	−1.14	3.26	+0.95	1.19	−2.02	1.99	−0.85	2.09	−1.75	40.14	−6.86
Bruceton Mills	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.03	.....	2.59	.....	1.50	.....	4.32	.....	2.83	.....	.....	.....
Buckhannon	5.11	+0.68	3.75	−0.10	4.03	−0.57	5.78	+1.59	3.84	−0.70	6.46	+1.52	7.10	+1.85	3.30	−0.81	2.87	−0.29	0.96	−2.42	4.50	+1.20	3.60	−0.48	51.30	+1.47
Cairo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.99	−0.68	.....	.....	1.94	−1.22	3.15	+0.55	2.42	−1.44	.....	.....
Cortland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.79	.....	5.26	.....	2.55	.....	1.23	.....	1.68	.....	3.09	.....	.....	.....
Creston	5.20	+1.43	2.98	+0.10	3.55	−0.49	5.22	+1.27	6.31	+2.52	4.75	+0.50	4.30	+0.29	3.88	+0.46	3.01	+0.45	1.39	−1.71	2.84	+0.36	2.45	−0.93	45.88	+4.25
Davis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.58	.....	6.52	.....	3.96	.....	3.69	.....	1.88	.....	4.50	.....	5.13	.....	.....	.....
Elizabeth	3.67	.....	2.53	.....	3.28	.....	4.82	.....	2.72	....	5.36	.....	5.09	.....	4.84	.....	2.28	.....	1.07	.....	2.11	.....	1.73	.....	39.50	.....
Elkins	4.66	+1.32	3.10	−0.19	4.57	+0.50	5.45	+2.16	2.19	−1.79	3.83	−1.21	5.27	+0.63	3.33	−0.32	3.35	+0.48	1.07	−1.35	3.72	+0.86	2.78	−0.64	43.32	+0.45
Fairmont	3.15	−0.82	2.97	−0.04	2.66	−0.18	4.26	+1.14	2.15	−1.90	4.12	−0.38	6.73	+2.07	7.48	+4.08	3.86	+1.30	0.90	−1.91	3.27	+0.57	2.66	−0.73	44.21	+3.20
Glenville	5.15	+0.83	2.48	−1.28	3.13	−1.15	5.74	+1.94	6.97	+2.81	5.84	+1.42	6.92	+1.68	2.45	−1.50	1.34	−1.99	1.27	−1.83	3.61	+0.65	3.30	−0.38	48.20	+1.20
Grafton	4.35	+0.27	3.20	−0.10	3.13	−0.84	5.97	+2.28	1.83	−2.54	2.95	−1.63	4.93	+0.06	2.82	−1.14	3.22	+0.49	0.77	−2.23	2.80	−0.18	2.14	−1.50	38.11	−7.06
Lost Creek	3.98	−0.11	2.98	−0.02	4.06	−0.03	4.12	+0.72	2.16	−2.12	4.34	+0.21	4.67	−0.08	1.69	−2.36	3.84	+0.96	0.80	−1.95	3.66	+1.21	2.91	−0.51	39.21	−4.08
Mannington	3.65	−1.02	3.49	+0.80	3.12	−0.66	4.85	+0.93	1.64	−2.55	4.78	+0.59	7.74	+2.63	4.55	+0.66	5.38	+2.35	1.08	−1.96	3.26	+0.80	2.91	−0.64	46.45	+1.93
Morgantown	2.52	−1.38	.....	.....	.....	.....	3.01	−0.38	.....	.....	3.27	−1.51	4.46	−0.86	6.71	+2.38	2.51	−0.56	0.12	−3.09	3.22	+0.32	.....	.....	.....	.....
Moundsville	3.52	+0.30	1.77	−0.47	2.51	−0.80	4.08	+1.10	1.90	−1.51	3.58	+0.11	6.36	+1.99	2.07	−1.52	3.26	−0.21	1.73	−1.47	1.85	+0.11	2.92	−0.13	35.55	−2.50
New Cumberland	2.33	−0.45	2.01	−0.38	3.59	+0.24	4.37	+0.97	.....	.....	.....	.....	.....	.....	3.11	−0.39	1.99	−0.56	1.79	−1.25	1.62	−0.24	2.28	−0.36	.....	.....
New Martinsville	3.20	−0.58	2.55	−0.45	2.75	−0.93	4.25	+0.69	1.75	−2.06	6.10	+2.10	7.15	+2.43	4.30	+0.76	4.35	+1.76	1.40	−1.53	2.08	+0.58	2.08	−1.46	41.96	+1.31
Parkersburg	3.83	+0.64	2.16	−1.19	2.92	−0.90	6.38	+3.47	1.64	−1.82	5.20	+0.55	4.56	−0.10	2.65	−0.88	3.69	+0.97	1.40	−1.04	1.82	−1.01	1.68	−1.09	37.93	−2.40
Parsons	6.39	+1.70	2.37	−1.10	3.65	−0.42	5.29	+1.43	.....	.....	6.30	+1.11	8.94	+4.00	2.05	−1.82	3.33	+0.19	0.80	−2.18	4.85	+2.42	3.39	−0.42	.....	.....
Philippi	4.53	+0.23	2.55	−0.84	3.56	−0.70	5.69	+1.82	2.48	−1.82	5.19	+0.65	5.86	+0.91	2.32	−1.79	4.42	+1.26	0.88	−2.01	4.24	+1.48	2.60	−1.35	44.32	−2.16
Pickens	6.41	−0.28	5.49	+0.32	3.33	−2.60	7.26	+2.28	4.66	−0.66	4.89	−1.26	7.73	+1.40	8.42	+3.43	3.18	+0.80	1.92	−2.22	3.99	+0.14	3.12	−2.15	60.40	−0.80
Rowlesburg	4.33	−0.17	3.53	+0.12	4.01	−0.30	5.89	+1.93	2.91	−2.49	6.48	+1.51	6.24	+1.25	4.71	+0.36	3.04	+0.03	1.91	−1.16	4.11	+1.06	4.01	+0.15	51.17	+2.29
St. Marys	3.77	−0.90	2.70	−0.54	3.27	−0.39	4.75	+1.20	3.09	−0.84	5.65	+2.05	4.84	+0.79	2.69	−2.25	3.91	+1.54	1.20	−1.41	2.56	−0.09	2.12	−1.50	40.55	−2.34
Smithfield	3.43	−1.90	3.69	+0.07	2.87	−1.17	5.25	+1.44	2.16	−2.15	5.83	+1.32	8.90	+3.73	3.04	−1.52	3.84	+0.69	1.30	−2.26	3.86	+0.85	3.99	−0.10	48.16	−1.00
Stony River Dam	2.76	.....	2.76	.....	2.91	.....	4.12	.....	3.52	.....	5.70	.....	5.62	.....	9.28	.....	3.17	.....	1.47	.....	1.49	.....	3.48	.....	46.28	.....
Terra Alta	.....	.....	.....	.....	.....	.....	6.63	+2.79	2.87	−2.57	2.89	−1.15	5.30	+2.09	6.56	+1.75	3.12	−0.24	1.67	−1.89	2.50	−0.52	4.47	−2.00	.....	.....
Wellsburg	3.09	−0.37	1.49	−1.24	2.06	−1.27	4.81	+1.78	1.32	−2.24	9.70	+5.42	4.47	−0.13	5.43	+1.65	3.43	+0.65	1.46	−1.41	3.48	+1.32	2.25	−0.90	42.99	+3.26
Weston	4.89	+0.74	3.80	+0.07	3.74	−0.75	5.58	+1.57	3.93	−0.40	5.24	+0.72	4.75	−0.23	3.24	−0.71	2.84	−0.06	0.98	−2.20	3.86	+0.66	3.46	−0.24	46.31	−0.83
Wheeling	3.50	+0.36	1.81	−0.74	2.30	−0.78	4.39	+1.30	2.11	−1.39	4.47	+0.67	3.38	+0.13	2.98	−0.71	2.32	−0.19	1.77	−0.87	2.18	−0.26	2.30	−0.69	33.51	−3.17
SOUTHERN DIVISION.																										
Bancroft	5.62	+1.29	2.18	−0.78	3.20	−0.78	4.54	+0.75	2.08	−2.19	4.35	−0.29	3.32	−0.76	3.39	−1.09	3.08	+0.31	1.22	−2.08	2.02	−0.40	2.22	−1.30	37.20	−7.32
Beckley	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.38	−0.87	3.35	−0.92	3.09	+0.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bluefield	3.73	+0.64	4.06	+1.05	3.88	−0.23	4.05	+0.59	3.15	−0.51	4.25	−0.16	3.35	−1.20	8.39	+4.21	3.80	+1.20	0.44	−2.49	5.35	+3.02	3.84	−0.90	48.29	+5.22
Camden-on-Gauley	7.24	.....	3.42	.....	3.94	.....	5.49	.....	4.02	.....	6.50	.....	6.46	.....	5.54	.....	3.24	.....	1.02	.....	5.03	.....	3.27	.....	55.17	.....
Charleston	7.19	+3.31	2.70	−0.91	3.95	−0.46	5.52	+1.84	2.71	−1.36	7.23	+2.70	5.00	+0.88	3.33	−1.06	4.88	+1.86	1.40	−1.49	4.58	+1.66	2.76	−0.57	51.25	+6.43
Clay	4.94	.....	2.07	.....	2.97	.....	4.91	.....	3.62	.....	4.73	.....	2.91	.....	2.00	.....	2.55	.....	1.32	.....	3.75	.....	2.21	.....	37.98	.....
Cuba	4.74	+1.08	2.22	−0.75	3.83	−0.14	5.52	+2.14	2.60	−0.81	5.01	+1.81	3.00	−1.09	1.76	−1.25	1.88	−0.30	0.85	−2.29	2.08	−0.13	1.65	−1.65	35.14	−3.35
Dam 19 O. R	4.25	.....	2.03	.....	3.27	.....	6.84	.....	3.08	.....	3.84	.....	4.93	.....	2.37	.....	3.84	.....	1.85	.....	1.83	.....	2.06	.....	40.19	.....
Dam 20 O. R	4.72	.....	2.54	.....	3.98	.....	5.00	.....	2.79	.....	5.34	.....	3.86	.....	4.18	.....	3.96	.....	2.53	.....	1.91	.....	2.07	.....	42.88	.....
Dam 22 O. R	4.27	.....	2.19	.....	3.80	.....	4.47	.....	3.18	.....	3.67	.....	5.21	.....	2.33	.....	2.71	.....	1.61	.....	1.83	.....	2.73	.....	38.00	.....
Dam 26 O. R	4.22	.....	2.20	.....	3.20	.....	5.06	.....	2.00	.....	3.66	.....	6.58	.....	3.59	.....	2.31	.....	0.49	.....	2.06	.....	1.85	.....	37.22	.....
Evans	4.01	.....	2.58	.....	3.06	.....	6.36	.....	2.75	.....	4.62	.....	3.68	.....	3.53	.....	3.56	.....	0.77	.....	2.04	.....	1.62	.....	38.58	.....
Gary	5.64	.....	3.69	.....	3.82	.....	4.29	.....	4.27	.....	4.21	.....	3.55	.....	6.29	....	2.51	.....	0.58	.....	4.17	.....	2.83	.....	45.85	.....
Green Sulphur Springs	.....	.....	4.39	+1.66	8.87	+4.99	6.84	+3.68	3.91	+0.40	5.81	+1.71	4.25	−0.23	.....	.....	.....	.....	.....	.....	.....	.....	3.76	−1.14	.....	.....
Hinton	4.32	+1.14	2.70	−0.36	3.92	−0.13	4.82	+1.37	2.92	−0.88	4.98	+0.77	3.72	−0.23	6.58	+2.81	3.06	−0.30	0.46	−2.17	4.78	+2.66	2.22	−0.60	44.48	+4.08
Holcomb	5.61	.....	3.69	.....	4.82	.....	4.70	.....	4.41	.....	6.28	.....	5.20	.....	4.64	.....	3.29	.....	1.45	.....	5.69	.....	.....	.....	.....	.....
Huntington	5.04	+1.25	2.22	−1.15	2.96	−1.39	5.78	+2.15	2.80	−1.28	2.92	−1.40	4.92	+0.71	2.96	−0.78	2.42	−0.09	1.08	−1.49	2.10	−0.63	1.96	−1.57	37.10	−5.17
Kanawha Falls	5.22	.....	2.25	.....	2.42	.....	3.55	.....	3.06	.....	5.74	.....	4.65	.....	2.57	.....	3.03	.....	1.43	.....	3.63	.....	1.32	.....	38.87	.....
Kaylord	5.76	.....	2.76	.....	4.00	.....	5.48	.....	4.07	.....	7.62	.....	4.16	.....	3.12	.....	4.05	.....	1.42	.....	3.89	.....	2.77	.....	49.10	.....
Lewisburg	3.45	+0.08	2.44	−0.46	3.35	−0.75	5.61	+2.41	2.50	−1.22	4.88	+0.68	3.90	−0.06	5.08	+1.53	3.30	+0.46	0.34	−2.48	4.70	+2.46	2.07	−0.70	41.62	+1.95
Logan	.....	.....	2.10	−2.19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marlinton	4.03	−0.04	2.78	−1.64	5.04	+0.71	5.56	+1.23	3.05	−1.01	5.53	+0.60	5.24	−0.07	8.90	+4.50	.....	.....	.....	.....	.....	.....	4.37	+0.95	.....	.....
Miller	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.44	.....	5.70	.....	3.89	.....	4.41	.....	1.14	.....	5.02	.....	2.73	.....	.....	.....
Point Pleasant	4.23	+0.34	2.25	−1.23	3.75	−0.39	6.22	+2.97	2.64	−0.92	4.50	+0.11	5.17	+1.11	2.78	−0.35	2.29	−0.04	1.25	−1.50	1.93	−0.85	1.98	−1.30	38.99	−2.05
Powellton	5.86	+2.01	3.19	+0.15	4.45	−0.19	4.74	+1.12	3.47	−0.66	5.62	+0.03	3.56	−1.00	1.81	−2.50	2.39	−0.41	0.90	−1.56	4.34	+1.63	1.69	−1.43	42.02	−2.81
Raleigh	4.95	.....	3.02	.....	5.01	.....	4.48	.....	3.41	.....	4.94	.....	4.91	.....	2.93	.....	2.98	.....	1.47	.....	.....	.....	2.54	.....	.....	.....
Renick	3.31	.....	1.59	.....	3.86	.....	4.88	.....	1.89	.....	5.19	.....	3.25	.....	4.18	.....	2.82	....	0.35	.....	4.60	.....	3.03	.....	38.95	.....
Robertsburg	5.04	+1.09	2.05	−1.02	3.25	−0.87	4.27	+0.59	1.41	−2.31	3.54	−0.44	3.31	−0.45	2.89	−0.38	1.98	−0.34	0.71	−2.17	1.60	−0.80	1.81	−1.73	31.86	−8.83
Ryan	4.79	+0.60	2.99	−0.40	3.12	−1.27	4.59	+0.78	2.99	−0.75	4.67	+0.21	5.62	+1.12	2.97	−0.94	4.49	+1.80	1.27	−2.31	3.38	+0.95	1.71	−1.79	42.59	−2.00
Sharples	.....	.....	.....	.....	3.40	.....	3.71	.....	3.02	.....	5.24	.....	3.98	.....	3.04	.....	2.49	.....	1.54	.....	1.88	.....	2.82	.....	.....	.....
Spencer	5.33	+1.06	2.79	−0.26	3.64	−0.31	5.41	+1.09	2.83	−0.84	2.53	−1.90	3.24	−1.10	3.46	−0.10	2.64	−0.38	1.15	−1.88	2.99	+0.48	2.56	−0.93	38.57	−5.07
Union	4.85	+1.29	2.31	−0.43	2.70	−1.05	4.64	−1.33	1.90	−0.91	6.10	+1.89	4.36	−0.27	5.10	+1.39	1.68	−0.96	0.25	−2.75	4.05	+2.18	1.54	−1.04	36.48	−1.99
White Sulphur Springs	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.63	.....	3.32	.....	0.50	.....	3.44	.....	2.15	.....	.....	.....
Williamson	6.33	+2.11	2.69	−0.48	4.30	−0.32	4.32	+0.98	2.35	−1.53	5.17	+0.57	2.71	−1.63	3.34	−0.21	2.79	−0.24	1.60	−1.22	2.80	+0.22	2.52	−1.39	40.92	−3.14

THE WEATHER BY MONTHS.

(Continued from page 99.)

prevailed from the 5th to the 25th, when no measurable precipitation was recorded, except at one station (Cuba) on the 16th. There was an average of 22 clear days. Heavy to killing frosts occurred on the 3d in some of the more elevated districts, but growth continued in most of the agricultural districts until near the close of the month.

NOVEMBER.—November was nearly continuously warm and much wetter than usual, with about the normal amount of sunshine The rainfall was the greatest of November record, except in 1900. Killing frosts were general on the 3d and 6th, the latest of record in many districts. The conditions were generally favorable for outdoor work. Heavy rains and flooding caused considerable crop damage on low bottom lands.

DECEMBER.—December was also nearly continuously warm and considerably drier than usual. The snowfall averaged only 3.7 inches. The conditions were excellent for outdoor work and the month was one of the most pleasant of winter record.

UNIVERSITY OF ILLINOIS-URBANA
3 0112 084237798